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ABSTRACT

This publication provides a course of instruction for training individuals to administer medications in a group home or residential care home. The competency-based curriculum and instructional materials presented in the document contain three instructional units: Administer Medications, Obtain Vital Signs, and Explore Legal Issues. This format includes the following basic components that form a unit of instruction: objective sheet (introduction, unit and specific objectives), instructor's guide (unit contents, suggested activities, unit references), instructor's supplements (pretests, forms, answer keys), transparency masters, information sheets, student supplements, assignment sheets (written exercises), procedure sheets (a list of equipment, tools, and materials needed to complete a manipulative or psychomotor skill), activity sheets, tests, and evaluation forms. Depending on the specific objectives, any given unit of instruction may or may not include transparency masters, supplements, assignment sheets, procedure sheets, or activity sheets. (YLB)

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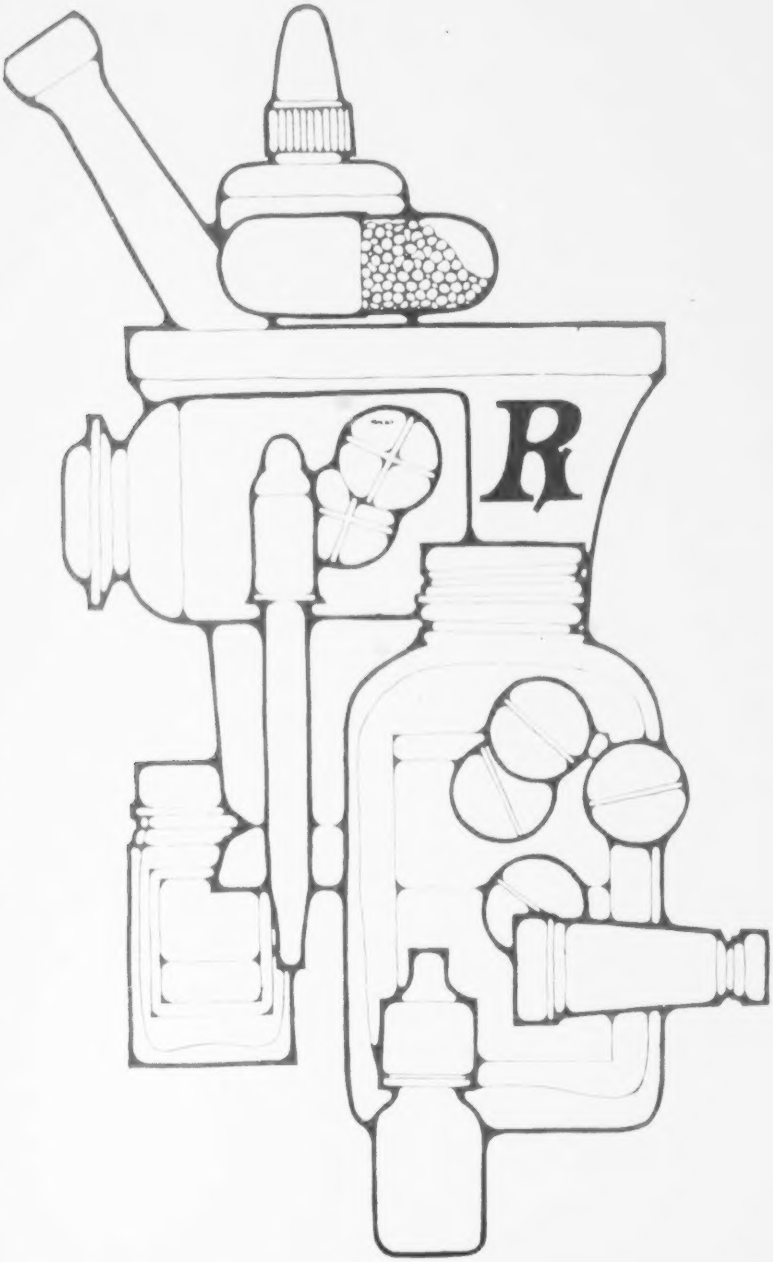
MEDICATION ADMINISTRATION TECHNICIAN



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Medication Administration Technician

Developed by the
Curriculum and Instructional Materials Center
Oklahoma State Department of Vocational and Technical Education
Dr. Roy Peters, Jr., Director
Oklahoma State Board of Vocational and Technical Education
Gerald E. Hoeltzel, Chairman

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MEDICATION ADMINISTRATION TECHNICIAN

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FOREWORD

Medication Administration Technician is the result of the cooperative effort among the Oklahoma State Department of Health, the Oklahoma State Department of Human Services, and the Oklahoma State Department of Vocational and Technical Education.

Medication Administration Technician is a course of instruction for training individuals to administer medications in a group home or residential care home. This cooperation among state agencies ensures that the competency-based curriculum and instructional materials will meet the needs of several agencies and provide consistency in program expectation. The program itself will allow expanded career opportunities for medication administration technicians.

Although this series reflects a systematic approach to instructional materials development and utilization of educational technology innovations, the instructor should adapt and modify information in *Medication Administration Technician* to coincide with local conditions and specific student/client needs.

ROY PETERS, JR.
State Director

PREFACE

For many years the Oklahoma State Department of Vocational and Technical Education has recognized the need for providing quality competency-based instructional materials for vocational education. Oklahoma has met this challenge by providing nationally recognized curriculum and services since 1972.

In 1989 Oklahoma's Curriculum and Instructional Materials Center (CIMC) met with representatives of Oklahoma State Department of Health and the Oklahoma State Department of Human Services to discuss the development of instructional materials that would be used to train a medication administration technician competent to administer medication in both a group home and a residential care home. As a result, instructional materials have been developed based on the competencies necessary for certification as a medication administration technician in a group home. In addition, the course meets the requirements for a minimum of 15 class hours as required training to work in a residential care home.

It is the intention that this publication be used to train medication administration technicians and that all technicians will demonstrate the competencies outlined in this publication before placement with an agency. The goal is to train qualified, caring individuals to work with special needs clients. It can be attained if standards are recognized, set, and adhered to as required to be certified as a medication administration technician.

PHYLLIS A. TARRANT,PH.D.
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Thank-you goes to the following ad hoc committee members who contributed their time, talents, and knowledge in determining the content of this manual:

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Thank-you also to the staff of the Oklahoma State Department of Vo-Tech, to Dr. Roy Peters, Jr., Director, to Dr. Charles O. Hopkins, Assistant State Director, and to Sheila Stone, who led the curriculum staff during the development of *Medication Administration Technician*.

Technical writers who worked on this manual are Sarah Cloud and Jerry Weir. Word processing technicians who prepared the manuscript include Mary Ann Houston, Jana Straka, Kim Taylor, and Brenna Tillman. Gina Lauer copyedited many of the units. Michelle Sharp prepared the desktop publishing version.

Directed by art manager Bob Davis, artists who prepared most of the illustrations for this manual are Gary Bradley, Roger Drake, Kim Hale, Kathryn Moore, Suzanne Morris, Robert Randall, and Scott Stone.

USE OF THIS PUBLICATION

INSTRUCTIONAL UNITS

Medication Administration Technician contains three instructional units. This format includes basic components that form a unit of instruction: objective sheet, instructor's guide, instructor's supplements, transparency masters, information sheet, student supplements, assignment sheets, procedure sheets, activity sheets, test, and evaluation forms. Depending on the specific objectives, any given unit of instruction may or may not include transparency masters, supplements, assignment sheets, procedure sheets, or activity sheets.

All of the unit components "zero in" on measurable and observable learning outcomes. When applicable, units include activities that use the affective domain. Instructors may supplement, personalize, localize, and motivate with these materials to develop a complete teaching/learning process.

Designed to be student centered and instructor facilitated, each unit of instruction is for use in more than one lesson or class period. The instructor will need to decide methods of presentation and demonstration to meet the needs of students. Careful study of each unit of instruction will help the instructor plan the presentations:

- How to use materials for independent study
- Amount of material to cover in each class period
- Skills — Supplies and equipment needed
  Amount of class time needed for demonstrations
  Amount of practice needed
- Supplementary materials, such as pamphlets or videos, to order
- Resource people to contact

Objective Sheets (white pages)

Each unit of instruction is based on the knowledge and skills needed for successful employment in an occupational area. Objectives are stated in two forms: unit objectives stating the subject matter to be covered in a unit of instruction, and specific objectives stating the performance necessary to reach the unit objective. Because the objectives of the unit provide direction for the teaching/learning process, teachers and students must have a common understanding of the intent of the objectives. Each student should have a copy of the objective sheet to refer to throughout the teaching/learning process. This will help answer any questions concerning performance requirements for each instructional unit.

The objectives can also help determine teaching strategies and instructional methods. Prepare for each unit by deciding how each objective can best be taught, depending on individualized or class instruction. Instructors should feel free to modify, delete, or add objectives to meet the needs of the students and community. If there are changes in the objectives, the instructor should supply the additional information, assignment, procedure, or activity sheets, and criterion test items.

Instructor's Guides (white pages)

The instructor's guide contains a list of the unit contents, suggested activities for individualized and group instruction, and unit resources.

The suggested activities include a guide to help instructors plan their presentation of the unit. Reading the suggested activities before teaching the unit allows time to obtain supplemental materials and audiovisuals and to contact outside resources. Instructor duties will vary according to the particular unit and whether the material is to be presented to a group or individualized.

References listed in the instructor's guide are those used in the development of the unit. The instructor may use the references to supplement knowledge of the subject area or to guide students with particular interests or occupation objectives in the area covered.

Instructor's Supplements (white pages)

This component includes the pretest, answers to pretest, and any additional material that would be utilized by the instructor to prepare for teaching the unit. The pretest helps meet the needs of individual students. Through the pretest, students can receive credit for previously gained knowledge or skills that meet the criteria or standards for quality and then use that instructional time to gain new information and skills.

Transparency Masters (white pages)

Transparency masters are included in these materials and are available for teacher and student use.

Information Sheets (green pages)

The information sheet provides "must know" content essential for meeting the objectives of the unit. The information is keyed to the specific objectives. Boxed items contain "nice-to-know" information and are not on the tests. The information sheet may also include "Notes", "Cautions," or "Warnings"; discuss these carefully and thoroughly.

Notes are short verbal additions to the information sheet or procedural outline that provide nice-to-know and decision-making information. A note may tell the student what to watch for or to consider at a given step. It may explain when a step may not be applicable. Notes offer guidance that may help the student understand the process and do it more efficiently.

Cautions are advisories that tell the student how to avoid causing minor personal injury or equipment damage.

Warnings are advisories that tell the student how to avoid serious personal injury or death to the student, persons in the workplace, or users of the project or the procedure.

Student Supplements (green pages)

Student supplements include material that provides additional information for understanding the topic but does not have direct application to specific objectives.

Assignment Sheets (tan pages)

Assignment sheets provide written exercises for instruction and practice of a specific objective. The introduction to the assignment sheet explains how the assignment sheet relates to the subject area and unit objectives and may provide instructional information or refer students to another component for such information.

Assignment sheets are intended to provide students with practice in exercising higher-order thinking skills. Often, assignment sheets will contain case studies or story problems or other situations in which the student must analyze the circumstances and determine correct responses.

Procedure Sheets (blue pages)

Procedure sheets are another important segment of a unit of instruction. The procedure sheets provide a list of equipment, tools, and materials needed to complete a manipulative or psychomotor skill. They describe a step-by-step procedure to complete each task or job. Diagrams, photographs, and illustrations assist students in achieving the skill.

The instructor should demonstrate the procedures outlined in each procedure sheet. Furthermore, the instructor needs to localize the procedure according to the equipment and supplies available in the local lab or practicum situation. Procedure sheets also furnish potential employers with a picture of the skills being taught and the performances they might reasonably expect from a person who has had this vocational instruction.

The instructor or a designated examiner should evaluate the procedure sheet performance. The student is either proficient or not. All procedures are to be evaluated, and students must be proficient in all procedures to receive certification as a medication administration technician. Evaluation forms are included at the end of the unit for documenting the procedure.

Activity Sheets (tan pages)

The purpose of activity sheets is to provide activities not directly in support of any one objective but which support several objectives or seek to influence the student's beliefs, attitudes, or appreciation of the study area.

Activity sheets vary greatly in their number and design from unit to unit. Some deal with the student attitudes and beliefs. These may ask rather personal questions and are not intended for review by anyone other than the student. Some activity sheets require the student to make written or oral reports. Other activity sheets may require the student to monitor his or her beliefs or other variables over a period of time and may have application in more than one unit.

Tests (yellow pages)

The test provides criterion-referenced evaluation on every objective listed in the unit of instruction. Note that both the paper/pencil and performance objectives must be evaluated. The written part tests students' understanding of the information sheet and assignment sheet objectives. The performance part tests students' ability to perform the procedures. The instructor may individualize the performance part as needed.

Performance tests may be conducted throughout the training program, as soon as the student is ready, and documented on the evaluation forms.

Answers to Tests, Assignment Sheets, Activity Sheets (pink pages)

Answers to tests, assignment sheets, and activity sheets assist the instructor in evaluating student performances.

The student must achieve 80 percent on each written objective and satisfactorily complete each procedure to pass the unit. A score of 80 percent overall is not acceptable. The student must prove competency in **each** objective.

Evaluation Forms (white pages)

Evaluation forms, whether filed out by an industry representative or the instructor, help standardize testing and reduce subjectivity. They document completion of the requirement and should be maintained in the student files.

METHODS OF DISSEMINATING MATERIAL

You will need to provide student materials for each student. Student materials contain everything but the tests and the answers to assignment sheets, activity sheets, and tests.

TEACHING METHODS

Keeping students motivated is a challenge. Supplement the objectives by providing the "why," personal experiences, and current information. Since you are teaching the material in a group setting, prepare for each unit by deciding the best way to teach each objective and allow for student input.

COMPETENCY PROFILES

A competency profile is available for each CIMC publication. Competency profiles document student performance. The profile contains a list of the specific job competencies that a student should achieve before leaving the training program. Profiles should be distributed to students as required.

CORRECTIONS AND SUGGESTIONS

The Curriculum and Instructional Materials Center (CIMC) wants to provide vocational instructors and students with materials that are accurate and effective. Although the CIMC strives to maintain the highest standards of development and production, oversights occasionally do occur. If you find any errors in this or other CIMC publications, or have suggestions for improving their usefulness in vocational programs, please notify the CIMC staff. One easy way of pointing out errors is to make a photocopy of the affected page and to indicate the correction on the copy. Mail this information to the CIMC, where it will be used to correct the publication before the materials are reprinted.

To ensure that the material is updated on a timely basis, notify the CIMC of necessary corrections as soon as possible after discovering the error. Do not assume that someone else will notice the error and inform the CIMC; other users may be making the same assumption. Please send corrections and recommendations for improving this publication to the following address:

Curriculum and Instructional Materials Center
Oklahoma State Department of Vocational and
Technical Education
1500 West Seventh Avenue
Stillwater, Oklahoma 74074-4364

OBJECTIVE SHEET

MEDICATION ADMINISTRATION TECHNICIAN ADMINISTER MEDICATIONS

INTRODUCTION

Learning how to administer medications is a very important skill and necessary if you are to become a medication administration technician. Although a number of disabled individuals require medications for illnesses, others require medicine to stay alive. For example, people with diabetes must have regular dosages of insulin to keep a safe blood sugar level; those with heart or blood pressure problems must take medicine to keep their circulatory system working properly. These examples can only partially emphasize the importance of medications in some people's lives. As a medication administration technician, you have the responsibility to administer medications to your residents in a safe, accurate, and timely manner. You will be charged with the responsibility for insuring that medications are delivered when required, and it is important for you to know the steps that will guide the staff in safe administration of medication.

Administering medications has many meanings. You will need to become familiar with the terms that designate the actual degree of involvement both for the medication administration technician and the resident.

- "Dispensing" means transferring one or more doses of medication from one labeled container to another labeled container.
- "Administration" means the removing of a single dose of medication from a labeled container and preparing that dose for distribution.
- "Monitor" means watch, observe, check and keep track of for a special purpose.
- "Self-administration" means the administration of resident's medication by the resident with periodic staff review.

UNIT OBJECTIVE

After completing this unit, you should be able to administer various medications, store the medications properly, and document the necessary information.

SPECIFIC OBJECTIVES

After completing this unit, you should be able to

1. List the "rights" of medication.
2. List proper storage procedures for medications.
3. List purposes of medication.
4. List factors affecting drug metabolism.
5. Document the administration of medications.
6. Administer oral medications.
7. Administer topical medications.
8. Administer eye, ear, and nose medications.

UNIT CONTENTS

- Objective sheet
- Instructor's guide
- Instructor's supplements

  Supplement 1 — Pretest

  Supplement 2 — Answers to Pretest

- Transparency masters

  Transparency Master 1 — Rights of Medication

  Transparency Master 2 — Administration Guidelines

  Transparency Master 3 — Routes for Administering Medication

  Transparency Master 4 — Resident's Log

  Transparency Master 5 — Resident's Log (continued)

  Transparency Master 6 — Resident's Log Corrections

  Transparency Master 7 — Resident's Log Corrections (continued)

  Transparency Master 8 — Complications of Long-term Drug Therapy

  Transparency Master 9 — Complications of Long-term Drug Therapy (continued)

  Transparency Master 10 — Pyramidal Symptoms

  Transparency Master 11 — Pyramidal Symptoms (continued)

  Transparency Master 12 — Measuring Utensils for Medications

- Information sheets
- Student supplements

  Student Supplement 1 — Terms Associated with Administering Medications

  Student Supplement 2 — Guidelines for Giving Medications

  Student Supplement 3 — Routes of Drug Administration

  Student Supplement 4 — Side Effects of Medication

  Student Supplement 5 — Policies/Laws Governing Controlled Drugs

  Student Supplement 6 — Abbreviations and/or Symbols Pertaining to Medication Administration

  Student Supplement 7 — Types of Drug Actions and their Descriptions

  Student Supplement 8 — Common Classes of Drugs and their Actions

  Student Supplement 9 — Extrapyramidal Symptoms

  Student Supplement 10 — Drugs used to treat Emotional Disorders

  Student Supplement 11 — Guidelines for Care of the Resident with Epilepsy

  Student Supplement 12 — Guidelines for Care of the Resident with Diabetes

  Student Supplement 13 — Signs/Symptoms of Communicable Disease

  Student Supplement 14 — Guidelines for Preventing Transmission of the AIDS Virus

  Student Supplement 15 — Guidelines for Teaching Self-medication

  Student Supplement 16 — Measure Liquid Medication

- Procedure sheets

  Procedure Sheet 1 — Administer Oral Medications

  Procedure Sheet 2 — Administer Topical Medications

  Procedure Sheet 3 — Administer Eye, Ear, and Nose Medications

- Test
- Answers to test
- Evaluation forms

SUGGESTED ACTIVITIES

- **Review unit and plan presentation.**

  1. Study the specific objectives to determine those you will cover in your presentation.
  2. Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques for additional objectives.
  3. Make arrangements for demonstration sessions and media materials for students to observe actual procedures.
  4. Make arrangements with a group home or residential care home for students to observe the administration of medications and documentation procedures.
  5. Determine how evaluation of procedures will be scheduled.

- **Obtain materials needed to supplement unit.**

  1. Videos

     NOTE: The following videos are available from Medcom/Trainex, P.O. Box 116, Garden Grove, CA 92642.

     a. Math and Measurements for Health Care Personnel: Household Measurements. Color, 15 minutes, Medcom/Trainex. Video points out which household utensils have exact measurements and which do not. Video also indicates conversion from fluid ounces to cubic centimeters or milliliters:

One fluid ounce = 2 tbsp = 30 cc = 30 ml

b. Medicating the Patient: Administering Oral, Topical, Suppository, and Inhalant Medications. Color, 21 minutes, Medcom/Trainex. Video stresses the five "rights" of medication and points out contraindications for oral medications (nausea, vomiting, NG tube with suction, semiconscious or unconscious state, impaired or absent gag or swallow reflexes). Video also illustrates how to administer oral medication to a resident with NG tube and suctioning.

2. Arrange for equipment and forms needed to practice administering medications.

3. Posters and charts on rules for administering medications.

4. Medical cards for students to use as a resource when identifying medications, side effects, etc.

- **Provide group instruction as required.**

  1. Review instructional outline for this unit. Modify suggestions to suit class needs, and plan activities for each class period.

  2. Prepare classroom.

     - Put up posters, charts, etc. on administering medications, types of drugs, five "rights" of medication.

     - Have available copies of current medication cards and the Physicians' Desk Reference.

     - Display sample forms used to document medication administration.

3. Introduce unit.

    - Discuss unit introduction on the objective sheet.
    - Point out that the medication administration technician is responsible for resident safety when administering medications.
    - Review the "Causes of actions" section of Student Supplement 3, "Civil Liability/Lawsuits" in the unit on legal issues.

4. Discuss unit objective.

5. Discuss specific objectives. Emphasize how accomplishing the specific objectives will lead to meeting the unit objective. Relate the objectives to your introduction.

6. Discuss information sheet.

    a. Discuss Objective 1 on the "rights" of medication.

        - Discuss Transparency 1, Rights of Medication and Transparency 2, Administration Guidelines.
        - Review Student Supplement 1, "Terms Associated with Administering Medications."
        - Discuss Student Supplement 2, "Guidelines for Giving Medications."
        - Stress the importance of following the instructions exactly and to remember the rights of medication.
        - Point out that medication administration technicians who work for an agency may need to know and follow that agency's policy on administering medications.
        - Stress to the students that it is their responsibility to report to the supervisor if a resident should refuse to take the medication.

- Stress the importance of the medication administration technician knowing what medication the resident takes, how to administer it, and what to expect from the resident in ease of administration and any side effects.

- Give students samples of medication records and have them measure the medications for administration.

- Have students read the pamphlets "Food and Drug Interactions" (HHS Publication No. [FDA] 84-3070) and "Here Are Some Things You Should Know About Prescription Drugs" (HHS Publication No. [FDA] 84-3124). Discuss the interaction of certain foods and drugs.

  NOTE: These pamphlets are available from Department of Health and Human Services, Public Health Service, Food and Drug Administration, HFE-88, 5600 Fishers Lane, Rockville, MD 20857.

- Discuss Student Supplement 3, "Routes of Drug Administration." Show Transparency 3, Routes for Administering Medications.

- Discuss Student Supplement 4, "Side Effects of Medications."

b. Discuss Objective 2 on storage of medications.

  - Discuss importance of storage of medication.

  - Observe correct storage methods during practice procedures. Call attention to positive, as well as, harmful practices.

c. Discuss objective 3 on purposes of medication, give specific examples.

d. Discuss objective 4 on factors affecting drug metabolism, give specific objectives.

e. Discuss Objective 5 on documenting administration of medications.

- Review importance of documentation in resident's log. Show Transparencies 4 and 5 to illustrate form and information.
- Remind students that honesty is the best policy—report mistakes and correct them as instructed for their personal protection and that of the resident.
- Show Transparencies 6 and 7 to illustrate corrections on resident's log.
- Be sure to discuss administration of medication within one hour after being given.
- Review Supplement 5, "Policies/Laws Governing Controlled Drugs."
- Review Supplement 6, "Abbreviations and/or Symbols Pertaining to Administration of Medications."
- Review Supplement 7, "Types of Drug Actions and their Descriptions."
- Show Transparencies 8 and 9, Complications of Long-term Drug Therapy.
- Review Supplement 8, "Common Classes of Drugs and their Actions."
- Review Supplement 9, "Extra pyramidal symptoms."
- Show Transparencies 10 and 11, discuss pyramidal symptoms.
- Point out Supplement 10, "Drugs Used to treat Emotional Disorders" as a resource for additional information.
- Have students practice documenting procedures in Objectives 6-8. Use forms provided.

- Have students view the video Medicating the Patient: Administering Oral, Topical, Suppository, and Inhalant Medications.

f. Discuss Student Supplement 11.

g. Discuss Student Supplement 12.

h. Discuss Student Supplement 13.

i. Discuss Student Supplement 14.

- Remind student it is essential for them to know the policy of the facility when coming in contact with body fluids.

j. Discuss Student Supplement 15.

k. Study Student Supplement 16, "Measure Liquid Medications."

Practice Exercise Answers:

3 tsp = 15 ml = 1/2 oz

1 tsp = 5 cc = 5 ml

1/2 oz = 15 ml = 3 tsp

1 oz = 6 tsp = 30 ml

1 tbsp = 15 ml = 3 tsp

- Demonstrate how to measure with liquids; have students practice.

- Discuss Transparency 12, Measuring Utensils for Medications

l. Discuss Objectives 6-8 and Procedure Sheets 1-3.

- Demonstrate correct procedures and answer questions as needed.

- Have students practice administering medications to medical models and simulators before administering medications to residents.

- Discuss schedule for students to demonstrate procedures.

  NOTE: Medical models and simulators are available from the following companies:

  Trainex (see address above)

Health Edco, Inc.	Concept Media
P.O.Box 21207	2493 DuBridge Ave.
Waco, TX 76702	Irvine, CA 92714
1-800-433-2677	1-800-233-7078
1-817-776-6461	1-714-660-0727

- Check documentation.

7. Give written test.

8. Evaluate student performance of procedures.

9. Reteach and retest as required.

10. Complete practicum for medication administration and documentation.

11. Complete appropriate section of competency profiles.

- **Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.**

UNIT REFERENCES

Arrowood, Vada and Tom Whalen. *Level I Medication Aide*. Columbia, Missouri: Instructional Materials Laboratory, University of Missouri-Columbia, 1985.

Medication Administration Training. East Central University, Ada, Oklahoma.

Peevy-Kaiser, Pamela. *Medication Training Curriculum Materials*. Oklahoma State Department of Human Services.

Sloan, Jamee Reid. *Practical Nursing I*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/ Curriculum and Instructional Materials Center, 1981.

Sloan, Jamee Reid. *Practical Nursing II*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/ Curriculum and Instructional Materials Center, 1983.

SUPPLEMENT 1

Pretest

Name______________________________**Score**__________

DIRECTIONS

Read the following questions and answer them appropriately.

1. List the "rights" of medication.

   a. ______________________________

   b. ______________________________

   c. ______________________________

   d. ______________________________

   e. ______________________________

   f. ______________________________

   g. ______________________________

2. List five guidelines for storing medications.

   a. ______________________________
   ____

   b. ______________________________
   ____

   c. ______________________________
   ____

   d. ______________________________
   ____

   e. ______________________________

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3. List five purposes of medication.

   a. ______________________________

   b. ______________________________

   c. ______________________________

   d. ______________________________

   e. ______________________________

4. List five factors affecting drug metabolism.

   a. ______________________________

   b. ______________________________

   c. ______________________________

   d. ______________________________

   e. ______________________________

5. Complete documentation for each procedure demonstrated.

6. Demonstrate the procedures for administering four types of oral medications.

7. Demonstrate the procedures for administering topical medications.

8. Demonstrate the procedures for administering eye, ear, and nose medications.

Patient		Admission Number	Home Number
Attending Physician	Phone Number	Admission Date	
Diet		Current Date	
STAFF'S SIGNATURES AND INSTRUCTIONS ON REVERSE SIDE			

Medication	Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	39	30	31

This area for Special Instruction

	Initials	STAFF'S SIGNATURE		Initials	STAFF'S SIGNATURE
1			8		
2			9		
3			10		
4			11		
5			12		
6			13		
7			14		

INDICATE INJECTION SITE WITH APPROPRIATE NUMBER

1. Buttocks (Gluteous) Left
2. Buttocks (Gluteous) Right
3. Arm (Deltoid) Left
4. Arm (Deltoid) Right
5. Thigh (Quadraceps) Left
6. Thigh (Quadraceps) Right
7. Abdomen Left
8. Abdomen Right

Date	Hour	MEDICATION & DOSAGE	Route	REASON	RESULT OR RESPONSE	Hour	SIGNATURE

R - Refused
H - Held at Doctor's Request
A - Resident out of Facility
O - Resident out of Medication

W - Resident at Work
DC - Discontinue
WEIGHT: _____ BLOOD PRESSURE: ______

SUPPLEMENT 2

Answers to Pretest

Objective 1

a. Right person

b. Right medication

c. Right dosage form

d. Right amount

e. Right route of administration

f. Right time and date

g. Right charting

Objective 2

Evaluated to the satisfaction of the instructor:

- Return medication to storage directly after administering the medications.

- Unless otherwise stated, store most drugs at room temperature (59°-86° F). Drugs stored at higher temperatures for long periods of time may deteriorate and lose their effectiveness.

  NOTE: In a hot climate consider the room temperature. Ask your supervisor for additional information about proper storage for medications.

- Use a refrigerator for medications that require cold or cool storage (36°-46° F).

- Keep medications tightly capped in their original containers; many drugs are sensitive to light and are packaged in light-resistant containers.

- Excessive moisture (humidity) can reduce the shelf life of many drugs. Keep drugs in a dry place such as an airtight container. Do not remove the drying packets from medicine containers that have them.

Objective 3

a. Prevention
b. Treatment
c. Diagnosis
d. Pain

Objective 4

a. Age
b. Body mass (weight)
c. Gender
d. Resident's belief in effectiveness of medication
e. Resident's ability to utilize the drug

Objective 5

Complete documentation for each procedure demonstrated

Objectives 6-8

Procedures 1-3 will be evaluated to the satisfaction of the instructor using the evaluation checklist provided.
TMS

REMEMBER THE FIVE "RIGHTS"

1\.
RIGHT
PATIENT

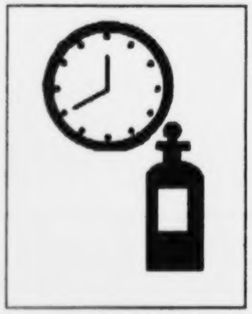
2\.
RIGHT
MEDICATION

3\.
RIGHT
DOSAGE

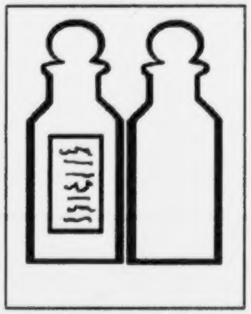
4\.
RIGHT
TIME

5\.
RIGHT ROUTE OF
ADMINISTRATION

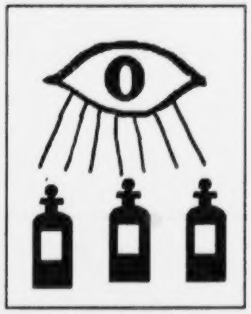
ADMINISTRATION GUIDELINES


ON TIME

give medicine on time


YES NO

do not use unlabeled bottles

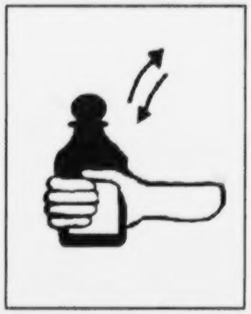

LOOK

look at the label three times

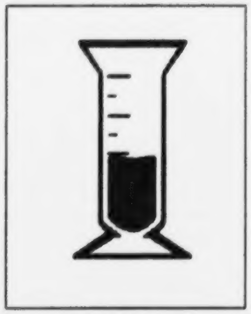
*When you take it down

*When you pour it

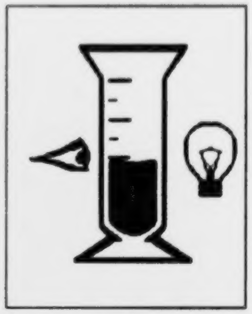
*When you put it back


SHAKE

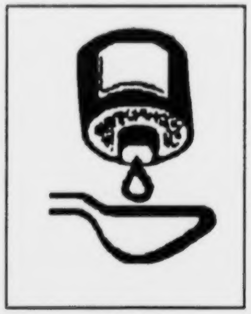
shake the bottle if the medicine is in suspension


MEASURE

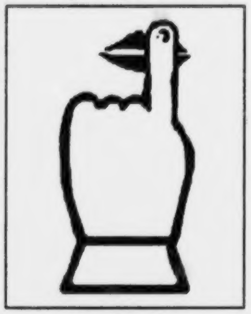
use an accurate measure


LIGHT

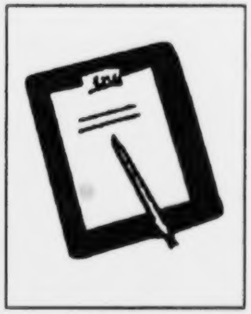
hold measure on the level of your eye in good light


POUR

pour medicines from the side of the bottle opposite the label

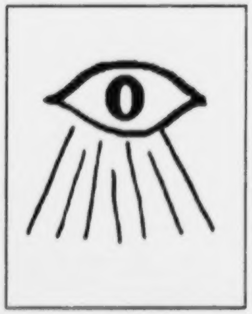

SILENCE

do not talk when measuring drugs



CHART

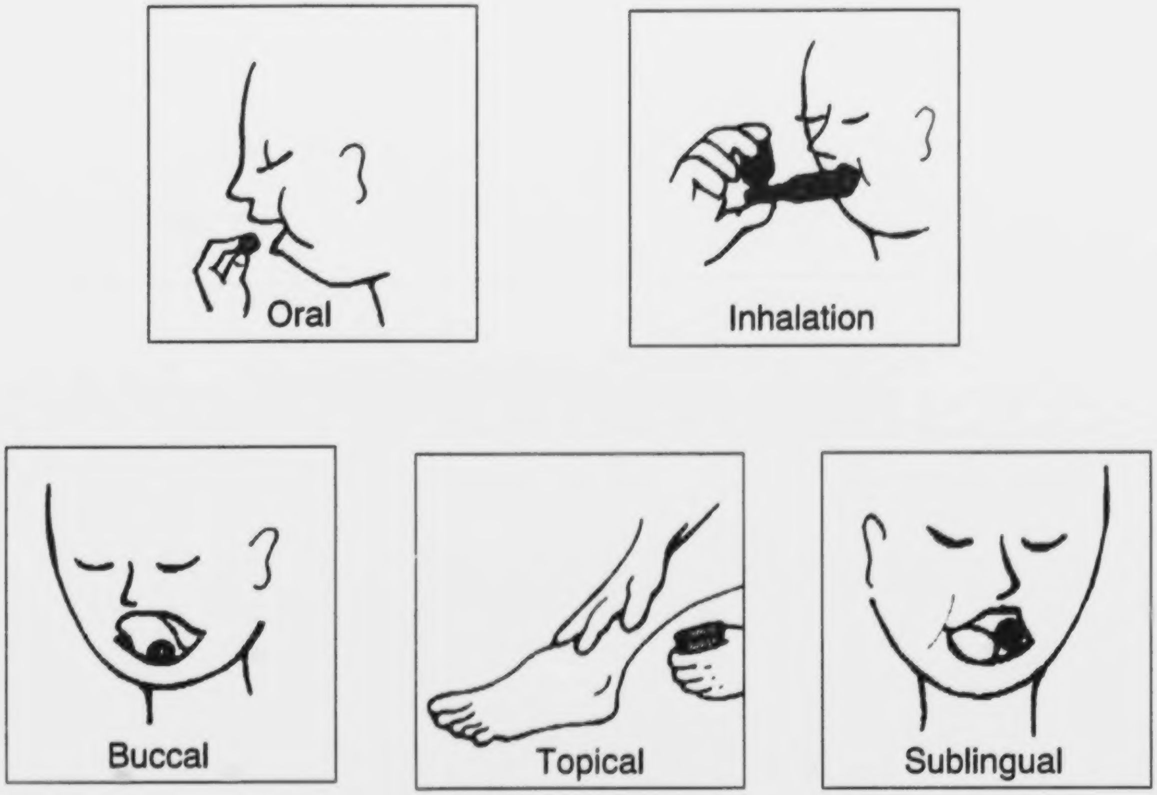
chart the medicine after the patient has taken it


KNOW

know why the medicine was given and watch for its effects

TRANSPARENCY MASTER 2
I - 21

TRANSPARENCY MASTER 3
1 - 23


Oral
Inhalation
Buccal
Topical
Sublingual

ROUTES FOR ADMINISTERING MEDICATIONS

TM 3

RESIDENT'S LOG

Patient		Admission Number	Home Number
Attending Physician	Phone Number	Admission Date	
Diet		Current Date	
STAFF'S SIGNATURES AND INSTRUCTIONS ON REVERSE SIDE			

Medication	Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	39	30	31

This area for Special Instruction

TRANSPARENCY MASTER 4
I - 25

RESIDENT'S LOG (Continued)

	Initials	STAFF'S SIGNATURE		Initials	STAFF'S SIGNATURE	INDICATE INJECTION SITE WITH APPROPRIATE NUMBER
1			8			1. Buttocks (Gluteous) Left 2. Buttocks (Gluteous) Right 3. Arm (Deltoid) Left 4. Arm (Deltoid) Right 5. Thigh (Quadraceps) Left 6. Thigh (Quadraceps) Right 7. Abdomen Left 8. Abdomen Right
2			9			
3			10			
4			11			
5			12			
6			13			
7			14			

Date	Hour	MEDICATION & DOSAGE	Route	REASON	RESULT OR RESPONSE	Hour	SIGNATURE

R - Refused
H - Held at Doctor's Request
A - Resident out of Facility
O - Resident out of Medication
W - Resident at Work
DC - Discontinue
WEIGHT: _____ BLOOD PRESSURE: ______

RESIDENT'S LOG CORRECTIONS

Patient | Admission Number | Home Number
Attending Physician | Phone Number | Admission Date
Diet | Current Date

STAFF'S SIGNATURES AND INSTRUCTIONS ON REVERSE SIDE

Medication	Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	39	30	31
Novatrin 10 mg (3x) Tid (Mesopin) 1-13-89	8 AM	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP															
	12 N																	PP														
	8 PM																															

This area for Special Instruction

New drug received 1-13-89 (Trade)
supply
1-17-89 charted in wrong time (P. Payne R.N.)

RESIDENT'S LOG CORRECTIONS (Continued)

	Initials	STAFF'S SIGNATURE		Initials	STAFF'S SIGNATURE
1	P.P	Paula Payne R.N	8		
2			9		
3			10		
4	J J	John Johnson - Rn	11		
5			12		
6			13		
7			14		

INDICATE INJECTION SITE WITH APPROPRIATE NUMBER

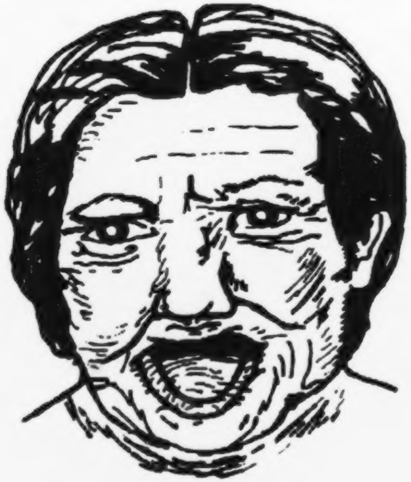
1. Buttocks (Gluteous) Left
2. Buttocks (Gluteous) Right
3. Arm (Deltoid) Left
4. Arm (Deltoid) Right
5. Thigh (Quadraceps) Left
6. Thigh (Quadraceps) Right
7. Abdomen Left
8. Abdomen Right

Date	Hour	MEDICATION & DOSAGE	Route	REASON	RESULT OR RESPONSE	Hour	SIGNATURE
1/25	8:00am	Tylenol (2)	PO	Headache	Good Results	9:30PM	John Johnson
					Poor Results		

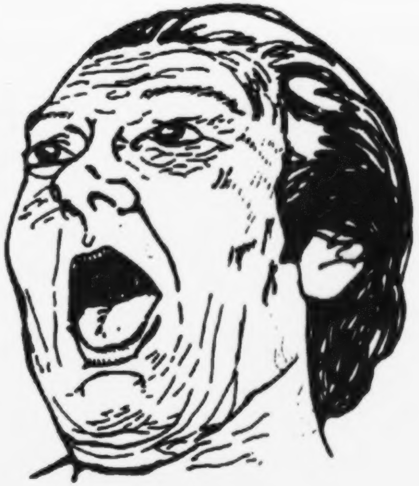
R - Refused
H - Held at Doctor's Request
A - Resident out of Facility
O - Resident out of Medication

W - Resident at Work
DC - Discontinue
WEIGHT: ____ BLOOD PRESSURE: ______

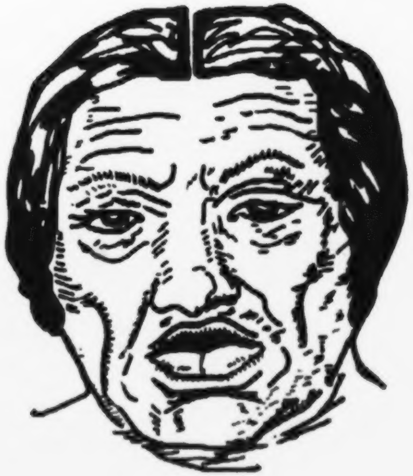
TRANSPARENCY MASTER 8
I - 33



BUCCAL SYMPTOMS



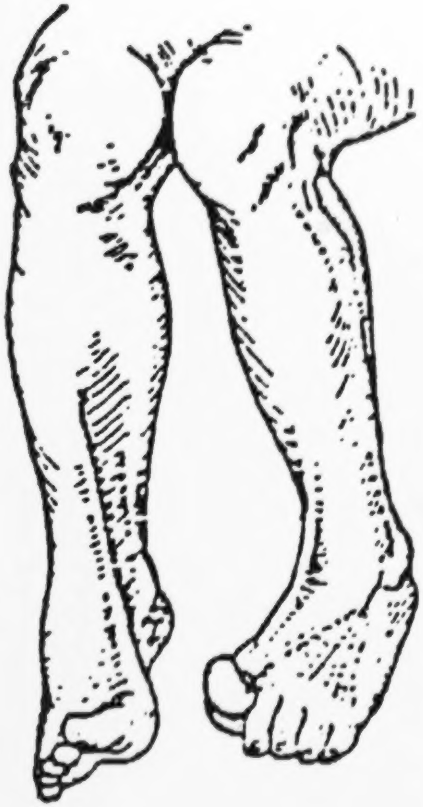
LINGUAL SYMPTOMS



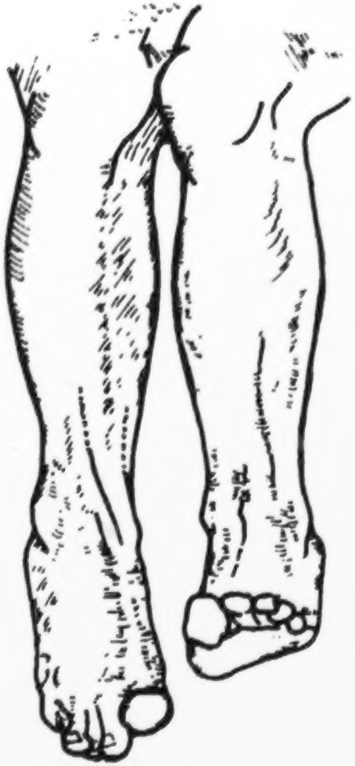
FACIAL SYMPTOMS

COMPLICATIONS OF LONG-TERM DRUG THERAPY

TRANSPARENCY MASTER 9
I - 35



PERSISTENT DYSKINESIA (ABNORMAL MOVEMENTS OF EXTREMITIES.)

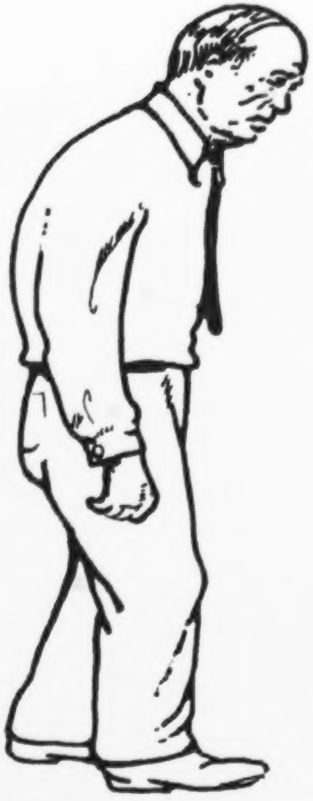


COMPLICATION OF LONG-TERM THERAPY WITH TRANQUILIZERS

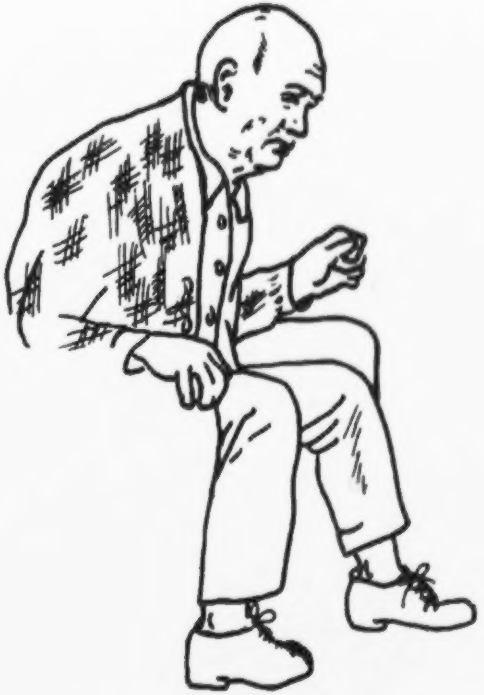
TM 9

TRANSPARENCY MASTER 10
1 - 37

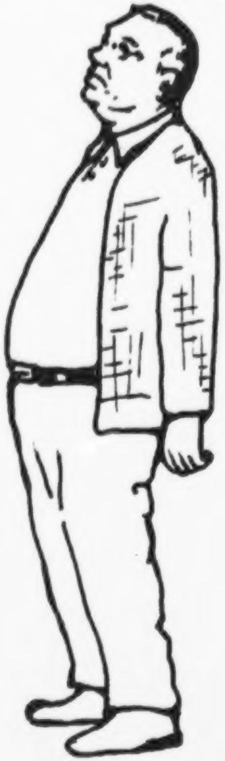
SHUFFLING GAIT



DIFFICULTY IN SITTING (AKATHISIA)



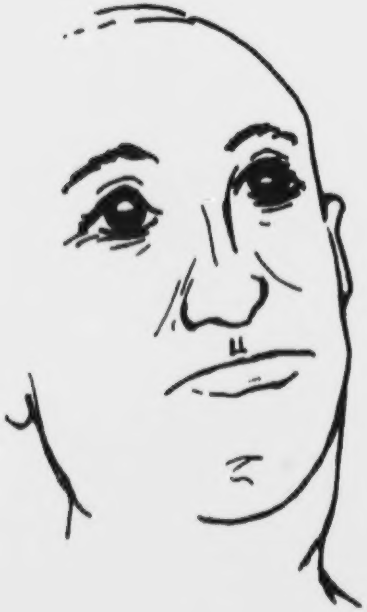
BACK-ARCHING & UPWARD GAZE (DYSTONIA)



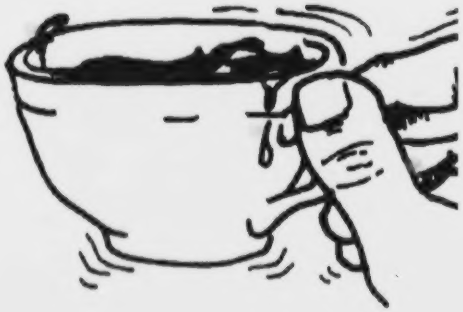
EXTRA-PYRAMIDAL SYMPTOMS

TRANSPARENCY MASTER 11
I - 39

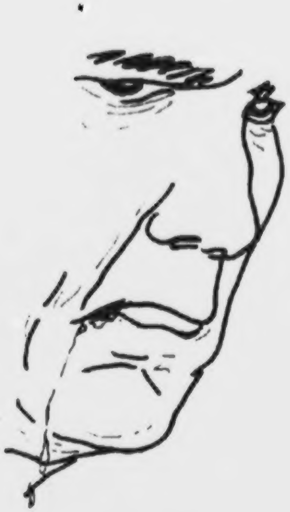
MASK-LIKE FACES



TREMOR

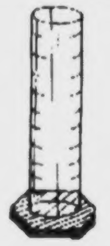


SALIVATION

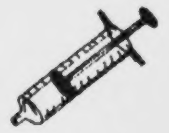


EXTRA-PYRAMIDAL SYMPTOMS

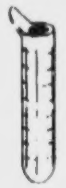
MEASURING UTENSILS FOR MEDICATIONS



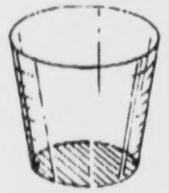
Graduated Cylinder



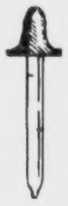
Needleless Syringe



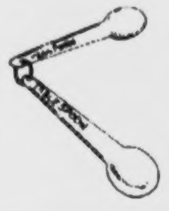
Graduated Cylinder with Lip



Medicine Cup

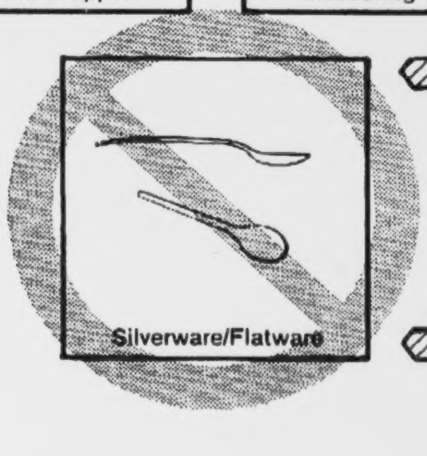


Medicine Dropper



Measuring Spoons

OK



Silverware/Flatware

***NOT* OK**

OBJECTIVE 1 **List the "rights" of medication**

INTRODUCTION

Giving medications is one of the most crucial tasks of a caregiver. The medication itself may have a major impact on the health of the resident, and that impact may change drastically if you do not administer the medication exactly as prescribed.

To ensure that you are giving the medication exactly as the physician prescribed, check the "rights" of medication before you administer any medication.

- Right person

  Your resident must receive only those medications prescribed for him or her, not for someone else. Check the label for your resident's name.

- Right medication

  If your resident takes more than one medication, you must be particularly careful to give the correct one. Check the label for the right medication.

- Right dosage form

  Some medications are available in several forms; aspirin, for example, can be a powder, liquid, or solid. Give the medication only in the form indicated in the care plan.

- Right amount

  Even though two people take the same medicine, their dosages may be different because of different body weights or reactions to the drug. Check the label for the correct amount for each resident.

- Right route of administration

  Not all medications are meant to be given the same way; for example, some are meant to be swallowed, some are to be dissolved under the tongue, and some are to be applied directly to the skin. The physician prescribes the medication to be given in a way that will do the most good for the resident.

- Right time and date

Some medications last only a few hours and must be given regularly throughout the day. Some are given only once a day. Some work best if taken on an empty stomach, before meals. Check the label for instructions about when to give the medication.

Another "right" applies after you give medications:

- Right charting

Immediately after giving the medication, write down the necessary information on the resident's medication chart. Do it while the information is still fresh in your mind.

CAUTION Read label for information about medication in relation to food or drink.

NOTE: Although the resident has the right to refuse medication, it is your responsibility to notify your supervisor that the resident has refused medication.

OBJECTIVE 2

List proper storage procedures for medications

INTRODUCTION

Storing medications properly is just as important as administering them properly. Medications may deteriorate or become contaminated if they are kept under certain conditions, such as extreme heat or light. Most commonly, the parents will already have a storage area assigned for medications. Your responsibility is to return all medications to their proper storage areas.

All medications must be kept in a locked storage area and you are responsible for the keys.

GUIDELINES

- Return medicine to storage directly after administering the medications.
- Unless otherwise stated, store most drugs at room temperature (59°-86° F). Drugs stored at higher temperatures for long periods of time may deteriorate and lose their effectiveness.

  NOTE: In a hot climate consider the room temperature. Ask your supervisor for additional information about proper storage for medications.
- Use a refrigerator for medications that require cold or cool storage (36°-46° F).
- Internal and external medications should be stored separately.
- Separate containers must be used for each resident's medication.
- Narcotics are to be stored in a separate, locked container and stored in a locked cabinet (double lock.)
- Make sure the medication storage area is kept clean at all times.
- Keep medications tightly capped in their original containers; many drugs are sensitive to light and are packaged in light-resistant containers.

- Excessive moisture (humidity) can reduce the shelf life of many drugs. Keep drugs in a dry place such as an airtight container. Do not remove the drying packets from medicine containers that have them.

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OBJECTIVE 3

List purposes of medication

- Prevention

  Vaccines are an example of drugs which are given for prevention of diseases.

- Treatment

  Most drugs are used for treatment of the symptoms of disease. Drugs which only relieve the symptoms without affecting the disease are referred to as palliative medications. Some drugs provide treatment for symptoms while allowing the body to work on curing the disease or condition.

- Diagnosis

  The diagnostic drugs have increased in number with the use of dyes for x-ray purposes.

- Pain Relief

  Pain relief or relief from symptoms associated with an illness can be as important as treatment for the illness or disease.

OBJECTIVE 4

List factors affecting drug metabolism

- Age

  The age of the resident has a definite impact since children and the elderly generally need lower dosages. Children and elderly are highly sensitive to drugs. Inadequate liver function and/or kidney function may be responsible.

- Body Mass (Weight)

  Body size also influences drug action, the drug dose must be adjusted in proportion to body size.

- Gender

  The sex of the resident may influence the choice because of hormone differences and ratio of fat per body mass.

- Psychological Factors

  The resident's belief in the effectiveness of the medication may affect the response to the medication. Don't put ideas in their heads by suggesting the medication may be making them tired, sleepy, jittery, etc.

- Environment

  Temperature affects drug activity, heat relaxes blood vessels and intensifies action, while cold has the opposite effects. Also high altitudes increase sensitivity.

- Time

  Usually this is related to food content of the stomach as well as the individual's metabolic rate (slower at rest).

- Rate of Excretion

  Any loss of fluids such as a loose stool, vomiting, or sweating could influence the absorption of the medication.

- Route

  Medications must be administered according to the route described on the prescription to be effective. Topical medications may be harmful if swallowed and pills will be absorbed more efficiently if taken with food, liquids, as directed.

- Drug Combinations

  Some drugs together may be more powerful than either alone, be aware of all drugs that a resident is taking including over the counter prescriptions.

- Condition of the Resident

  The presence of disease and the severity of symptoms must be considered.

- All of these and any individual consideration must be made prior to giving a medication.

OBJECTIVE 5

Document administration of medications

INTRODUCTION

Documenting the administration of medications benefits the medication administration technician and resident in a variety of ways.

- Writing down essential information helps you remember what medications you administered, and when you administered them.
- It is the only way for you to prove that medication was given in case a question arises.
- It allows staff or others involved in the resident's care to look back and see that the medications were given.
- Careful documentation ensures that the resident gets the best possible care concerning medications.
- Honesty is important, if you make a mistake report the error.

What to document

When documenting, you should record the following pieces of information:

1. Time given (date, time, A.M. or P.M.)
2. Medication given (write exactly what is on the bottle or container) If a trade or generic drug is substituted, make an entry on chart to note date received and new name of drug.
3. Dosage (amount of liquid or number of tablets, pills, capsules, etc.)
4. Route of administration (oral, rectal, etc.)
5. Response of resident (willingness or refusal to take the medicine; side effects such as nausea, drowsiness, hyperactivity, etc.)
6. If resident did not take medication at scheduled time, why?
7. Other information as requested by facility

General rules for charting

Charting methods vary in health-care institutions. Before charting, consult the supervisor about the practices in your particular agency.

- Print or write legibly.
- After completing entry, sign name and title.
- If you make an error in charting, draw a line through the entry and write "error in charting" above it. **Never erase an entry or make it illegible by using white-out.**
- Document tasks as you complete them.
- Be exact in recording time, effects, and results of all treatments and procedures.

  NOTE: Examples are illustrated on chart in Student Supplement 6.
- Be sure to use **BLACK** ink.

  NOTE: If a record is to be microfilmed, use black or blue ink. Do not use red ink or pencil.
- Use standard abbreviations only.
- Do not use ditto marks.
- Do not use the word "patient"; the people you care for are your "residents."
- Spell correctly; use a dictionary if necessary.
- Make statements clear and concise.
- Fill out all page headings before writing anything on the page.
- Do not skip lines.
- Chart administration of medication within one hour after being given.

  REMEMBER: If it is not written, it is not done!

Patient
Admission Number
Home Number
Attending Physician
Phone Number
Admission Date
Diet
Current Date

STAFF'S SIGNATURES AND INSTRUCTIONS ON REVERSE SIDE

Medication	Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	39	30	31

This area for Special Instruction

	Initials	STAFF'S SIGNATURE		Initials	STAFF'S SIGNATURE	INDICATE INJECTION SITE WITH APPROPRIATE NUMBER
1			8			1. Buttocks (Gluteous) Left
2			9			2. Buttocks (Gluteous) Right
3			10			3. Arm (Deltoid) Left
4			11			4. Arm (Deltoid) Right
5			12			5. Thigh (Quadraceps) Left
6			13			6. Thigh (Quadraceps) Right
7			14			7. Abdomen Left 8. Abdomen Right

Date	Hour	MEDICATION & DOSAGE	Route	REASON	RESULT OR RESPONSE	Hour	SIGNATURE

R - Refused
H - Held at Doctor's Request
A - Resident out of Facility
O - Resident out of Medication

W - Resident at Work
DC - Discontinue
WEIGHT: _____ BLOOD PRESSURE: ______

INFORMATION SHEET
I - 54

SUPPLEMENT 1

Terms Associated with Administering Medications

Adverse effects — Severe responses to drugs

Anaphylaxis — Severe, life-threatening allergic response

Antagonism — Situations in which two active drugs that are given together produce an effect that is less intense than when either drug is given alone.

Aseptic — Sterile; free from germs

Contraindication — Symptom or situation that makes a treatment or procedure unwise

Drug — A chemical that affects the body

Drug abuse — Chronic misuse of a drug

Drug dependence — An inability on the part of a person to control the intake of a drug

Drug idiosyncrasy — An unexpected response to a medication

Emesis — Vomiting

Enteric — Pertaining to the small intestine

Do not crush tablets that are enteric coated; they are not meant to dissolve until they reach the small intestine.

Indications — Reasons for a certain drug being used

Instillations — Putting a liquid slowly, drop by drop, onto a body surface or into a body cavity

Local effect — Reaction to the drug at the site to which it is applied or comes in contact.

Medication — Drug used for medical therapy

Nebulizer — Device that changes a liquid into a fine spray or mist; atomizer

Ophthalmic — Pertaining to the eye

Oral syringe — Needleless instrument used for giving liquid medication to children

Pharmacology — The study of drugs

Placebo — An inactive substance resembling a medication which produces effect through belief in that effect

Precautions — Warnings to use care when giving drugs under certain conditions

Side effect or toxic effects — Actions of a drug that are undesirable and may limit usefulness of the medications

Soluble — Able to be dissolved

Synergistic — Drugs working together to produce an effect which neither could produce alone

Systemic effects — Various organ systems in the body are affected by the medication even though the target organ shows the greatest responses

Teratogenic effects — Effects of a drug (or other agent) on the embryo or fetus by crossing the placenta

Therapeutic effects — Effects of drugs which prevent, diagnose or treat diseases or conditions

Tolerance — Property of some drugs which decreases effects of drug after repeated doses, therefore increasing amount necessary to obtain desired effect

Toxic effects — Dangerous effects of a drug caused by too much of the drug within the system

SUPPLEMENT 2

Guidelines for Giving Medications

Giving medications is one of the most crucial tasks of a respite care worker. The medication itself may have a major impact on the health of your resident, and that impact may change drastically if you do not administer the medication exactly as prescribed.

To ensure that you are giving the medication exactly as the physician prescribed, check the "rights" of medication before you administer any type of medication:

- Right person
- Right medication
- Right dosage form
- Right amount
- Right route of administration
- Right time and date
- Another "right" applies after you give medications:
- Right charting

GUIDELINES

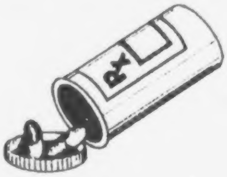
The person responsible for medication administration must personally prepare the dosage, observe the resident swallowing the medication, and chart the medication.

- Check all resident's medication sheets for specific information about resident's medication
- Never use an unlabeled bottle, label with resident's first and last names
- Do not dilute a medication unless indicated on label Never combine two partially filled containers of like medication

- Make sure all medications, including over-the-counter medications, are properly labeled with resident's first and last name
- Don't give medications to anyone except the person named on the label
- Never use medication that has passed its expiration date or was stored improperly

  NOTE: Follow facilities policy for storage and destruction of expired drugs.

- Follow physician's instructions on medication label
- Make accurate, exact measurements of medications
- Use special measuring devices as needed to get the exact dosage
- If resident is taking more than one medication, give the more important medication first—in case the resident has difficulty swallowing the tablets
- Explain to resident—at resident's level of understanding—exactly what you are going to do or what you wish resident to do
- Avoid touching the medication directly with your hands; pour tablets or capsules into lid of medicine bottle or into a medicine cup, not into your hand



- Never cut an unscored tablet
- Never call medication candy
- Place the lid of medicine bottle top side down on a table so that the inside will not be contaminated
- If medication is oral, position resident to make swallowing easy
- Give oral medications slowly

- Avoid scraping resident's teeth with the medicine cup or other measuring utensil
- Stay with the resident until medication is taken
- Do not rush the resident
- Store bottle of medication properly
- Observe resident for any side effects such as drowsiness, nausea, or hyperactivity
- Document the procedure: type of medication, time administered, and any side effect
- Do not record a medication until resident actually takes it
- If a scheduled medication is not given, document that it has not been given, the time, and the reason it was not given; DO NOT DOUBLE UP ON DOSAGE
- If the resident vomits the medication...
  - — Document the vomiting
  - — Otherwise, notify consulting pharmacologist, physician or nurse and inquire whether to reschedule medication and make sure proper documentation is in place

If a medication error occurs:

- Contact a physician immediately, follow instructions and make sure proper documentation is in place
- Have the recipient transported to the Emergency Room if you are unable to contact a physician
- Notify supervisor/nurse consultant
- Complete an incident Report including action taken
- Record in the recipient's chart/log/journal exactly what happened, what action was taken, and how the recipient was affected

- Continue to observe the recipient

When a medication is discontinued certain procedures must be followed:

- A physician's order should be on file in the recipient's record authorizing discontinuation
- Two direct care staff, one acting a witness, should
    a. compare the pharmacy label with the physician's order to make sure the right medication is being discarded
    b. destroy the medication beyond reclamation
        - Document the method of disposal of the medication on the recipient's record/journal/log, with both parties signature
        - Write discontinue or D/C in bold letters on the medication record starting where the next dose would have been recorded
        - For controlled drugs a licensed nurse, pharmacist, or doctor will need to destroy the drug, direct care staff can be a witness
        - Make other staff aware of the discontinuation of the medication

Phone orders for medication

THE MEDICATION ADMINISTRATION TECHNICIAN CANNOT TAKE VERBAL ORDERS FOR MEDICATIONS

All medications prescribed must have written orders by a physician, dentist, etc. Phone orders and verbal orders may be received only by another health professional.

Never institute a medication change given to staff person who is not licensed. Example: Doctor calls group home staff to tell them to decrease a resident's Phenobarbital by 30 mg.

This problem can be handled in one of three ways:

- Ask physician to call this order to the pharmacist. This new medication is then brought to the facility
- Contact R.N. consultant to place a call to the physician for medication order, RN provides written documentation
- Ask physician to write the order and pick the written order up and have it brought to the facility. Label should be flagged and properly changed as soon as possible by the pharmacist.

LABELS MAY BE CHANGED BY PHARMACIST ONLY

- If a resident dies...
    - — Remove medications from cabinet
    - — Place medications in a sealed bag and store for 30 days in a secure place
    - — After 30 days destroy medications according to the facility's or employer's policy
- If a resident is admitted to a home or returns to a home from a temporary leave...
    - — The medications brought into the home shall be counted and documented by the person admitting the resident and countersigned by the resident or responsible party
    - — The home shall implement a policy for using a symbol on the medication record when a resident leaves the home for a few hours, indicating that the resident accepts the medication and is responsible for taking it at the designated time.

Examples:
R - Refused
H - Held at Doctor's Request
A - Resident out of Facility
O - Resident out of Medication
W - Resident at Work
DC - Discontinue

- When a resident is discharged, moves, or goes on a temporary leave from the home...

  - The unused prescriptions shall be sent with the resident or with the responsible party

  - The resident record shall contain name of drug, documentation of quantities of medication sent, as well a the signature of the responsible party receiving the drugs

- Never tell a resident that the medication tastes good when it does not; you will lose the resident's trust

- Never hold a resident's nose shut or blow in his or her face to make the resident swallow medication

SUPPLEMENT 3

Routes of Drug Administration

Buccal — Placing a drug against the inner surface of the cheek so that the mucous membrane absorbs the drug

Inhalation — Breathing deeply or using a machine to apply a drug to the respiratory membrane

Irrigation — Flushing mucous membrane or skin with a drug that is in solution; useful for localized treatment

Instillation — Placing a drug that is in solution into a body cavity, where the membrane absorbs the drug

Inunction — Applying a liniment with rubbing to create friction

Oral — Swallowing a liquid, tablet, or capsule form of drug

Sublingual — Placing a drug under the tongue to be dissolved; membrane of the mouth absorbs the drug

Topical — Applying a drug to the skin

SUPPLEMENT 4

Side Effects of Medications

INTRODUCTION

When a medication is selected, various considerations are made. Generally, the effects of the drug are what is considered first. Side effects and contraindications must be taken into account as well. The medication must be chosen with regards to route of availability, dependability of absorption, method of distribution, rate of metabolism, and method of excretion. The presence of other drugs must be considered for interactions.

Drugs which are in the body frequently affect each other. The drugs may be **synergistic**, that is they work together to produce an effect which neither would produce alone. The drugs may also potentiate, which is to increase or prolong the effects of one or both of the drugs interacting. There is also the possibility of **antagonistic** effects where the two drugs counteract each other. There are both desirable and undesirable interactions of each of the types mentioned. Some medications achieve the desirable aspects by being produced as a combination of two or more drugs.

It is the medication administration technician's responsibility to be able to check for interactions. Most drug references only give drug information for the one drug alone but there are charts available which show the more common interactions. If these do not provide sufficient information, it is advisable to discuss the medication with the pharmacist. If any doubt exists discuss the situation with your supervisor.

When you administer medications, observe the resident for effects of the medication. Look for planned effects of the medication as well as side effects. Does the medication cause the effect for which it was prescribed?

You must record drug reactions and interactions. Use proper documentation procedures for your protection and the protection of the resident.

Documenting Medication Effects

In order to make your medication observations and the reporting and recording of those observations more consistent and accurate, you need to:

- Know the purpose and desired (therapeutic) effect of the medication

  For what conditions has the medication been prescribed? What signs will tell you that the medication is doing what it was prescribed to do?

- Know the response time.

  How much time should it take before desired effects can be expected to occur?

- Know any side effects that should be especially watched for.

  Given the personal characteristics of a specific recipient and/or the unique properties of a given drug, the doctor may want you to pay special attention to certain potential unwanted effects.

- Know any possible interactions with other medications, especially with medications that the recipient is currently taking.

  CAUTION
  If resident is seeing more than one doctor and/or more than one pharmacy is being used to supply medication, then extreme care must be taken to communicate with the doctor and/or pharmacist about all medications that the resident is using.

  The physician's knowledge of the recipient's current medications will allow him or her to predict whether interactions may occur. Knowing items 1 through 4 above, you may be able to identify changes more quickly and accurately.

- Report and record the effects you observe.

  Follow the guidelines you leaned for documentation of recipient care. Make your reporting and recording descriptive and objective. Avoid labeling effects, but do describe the change in physical condition or behavior as you observe it.

- Behavior plan

  The medication administration technician will need to know what medication is given in conjunction with the Behavior Plan. The medication administration technician plays an important role in the evaluation and reassessment of a resident's response to drug therapy.

SUPPLEMENT 5

Policies/Laws Governing Controlled Drugs

INTRODUCTION

Health care agencies have policies and procedures regulating the use of narcotics and other dangerous drugs in their facilities. These policies and procedures govern who is responsible for counting "controlled" drugs, who may have access to these drugs, and how to record use of controlled drugs. Even though these policies vary from one facility to another, each staff person should know what drugs are controlled and how to record their use.

Residential or group homes keep narcotics and other controlled drugs under double lock; that is, these drugs are kept within a locked closet within the locked medicine closet. The person in charge of the medicine closet must have the keys at all times, not putting them down or leaving them where someone else can get to the keys.

Health care agencies have special forms or records that contain data about each narcotic dose used. The facility's policy includes how many hours that a physician's order for narcotics and other controlled drugs is valid. Anyone who intends to administer one of those drugs must check the physician's order carefully to be sure that it has not expired.

The staff must be able to account for narcotics and other controlled drugs at all times. At each change in shift, the staff must count and check these drugs and report any problems immediately to the appropriate supervisor.

Policies may also include procedures how to dispose of a drug that is not administered or is accidentally contaminated. Special rules may concern the administration of narcotics or other controlled drugs by untrained employees.

NOTE: State narcotic laws may be stricter than federal laws. Follow whichever law is stricter, whether it is state or federal law.

CONTROLLED SUBSTANCE SCHEDULE

Effective in 1971, the Controlled Substance Act listed requirements for the control of dangerous drugs. There are five schedules of controlled substances, known as Schedule I, II, III, IV, and V. Drugs listed within a schedule share a similar potential for abuse. The lists of drugs change as new drugs are added or old ones reclassified.

SCHEDULE I

- High potential for abuse
- No currently accepted medical use for the drug in the United States
- Lack of accepted safety in the use of this drug, even under medical supervision

EXAMPLES: Psilocybin, Terrahydrocannabinols, Kerobemidone, Levomoramide, Racemoramide, Benzylmorphine, Dihydromorphine, Morphine methylsulfonate, Nicocodeine, Nicomorphine, and others.

SCHEDULE II

- High potential for abuse
- Accepted for medical use in the United States
- Possible severe physical or psychologic dependence if abused

EXAMPLES OF NARCOTIC DRUGS:

Opium, pantopon, dihydromorphinone, Numorphan (oxymorphone), Dolophine (merhadone), oxycodone, meperidine, Leritine (anileridine), Mepergan (meperidine), Percobarb, Levodromoran (racemorphan), Edrisal with codeine, Alvodine (piminodine)

EXAMPLES OF AMPHERAMINE DRUGS:

Benzedrine, Phantos, Dexedrine, Obolip, Dexamyl, Dexobarb, D.A.S., Amvicel, Bamadex, Oboceil, Dex-sule, Bipheramine, Eskarrol

EXAMPLES OF MERHAMPHERAMINE DRUGS:

Syndox, D.O.E., Desoxyn, Desbural, Norodin, Merhedrine, Obedrin, Ambar, phenmerrazine, methylphenidare

SCHEDULE III

- Potential for abuse less than the drugs in Schedule I and II
- Accepted for medical use in the United States
- Possible moderate or low physical dependence or high psychologic dependence if abused

EXAMPLES: Empirin with Codeine, A.S.A with Codeine, Codempiral #2, Tylenol with codeine, Hycodan, Tussionex, Phenaphen with Codeine, Hycomine, Soma with Codeine, Donnagesic #1, Paregoric, Noludar (methyprylon) Seconal (secobarbital), Chlorhexidol, Tuinal (amobarbital & Secobarbital), Alurate, Doriden (glurerhimide), Nembural (pentobarbital), Carbrinal, Burisol (burabarbital), Amytal (amobarbital), Fiorinal

SCHEDULE IV

- Low potential for abuse relative to the above classes
- Accepted for medical use in the United States
- Possible limited physical or psychologic dependence if abused

EXAMPLES: Phenobarbital, Placidyl (ethchlorvynol), Valmid (ethinamate), Miltown (meprobamate), Barbital, Methohexital, Methylphenobarbital, Nocted, Beta-Chlor (chloral betaine), Felsules, chloral hydrate, Kessodrate, Equanil, Somnos, Kesso-barnate, Paraldyhyde, Petrichloral

SCHEDULE V

- Low potential for abuse relative to substance in Schedule IV
- Accepted for medical use in the United States
- Possible limited or psychologic dependence if abused

EXAMPLES: Robitussin-AC, Chercol (with codeine), tepin Hydrate with Codeine, Cosadein

SUPPLEMENT 6

Abbreviations and/or Symbols Pertaining to Administration of Medications

INTRODUCTION

There are many abbreviations and symbols used in giving medications; unfortunately, not everyone uses the same ones. Each facility or agency has an approved list of abbreviations and symbols. You should know and use your facility's own list so that everyone who reads what you record will understand it.

The following list contains many of the most commonly used abbreviations and symbols.

aa, $\overline{aa}$	of each
ac	before meals
ad lib	as desired
AM, am	morning
amp	ampule
amt	amount
aq	water
bid	twice a day
$\bar{c}$	with
cap	capsule
dil	dilute
DC, disc	discontinued
elix	elixir
et	and
ext	extract
fl, fld	fluid
(G)	generic name
h, hr	hour
H	hypodermic
hs, HS	hour of sleep
IM	intramuscular
IV	intravenous
Ⓛ	left
mEq	milliequivalent
noc, noct, N	night
NKA	no known allergies
NPO, np	nothing by mouth
NS, N/S	normal saline
OD	right eye

OS	left eye
os	mouth
OU	both eyes
P̄	after
P.E.	Physical examination
per, /	by means of
PM, pm	after noon
po. PO, per os	by mouth
prn, PRN	as necessary
qd	every day
qh	every hour
q2h	every 2 hours
q3h	every 3 hours
qid	four times a day
qod	every other day
qs	quantity sufficient
R	rectal
Ⓡ	right
RBC	red blood count
Rx	take
s̄	without
ROM	range of motion
SC, subq	subcutaneous
SOB	shortness of breath
sig	label
SL	sublingual
sol	solution
sos	once, if necessary
sp	spirits
S/S	signs and symptoms
stat	immediately
supp	suppository
Sx	symptoms
syr	syrup
(T)	trade name
tab	tablet
tid	three times a day
tinct, tr	tincture
T,P,R	temperature, pulse, respiration
Tx	treatment
U, u	unit
U/A	urinalysis
ung	ointment
VS	vital signs
WBC	white blood count

W/C	wheelchair
>	greater than
<	less than
↓	decrease
↑	increase
♀	female
♂	male

SUPPLEMENT 7

Types of Drug Actions and their Descriptions

Depressant — Slows activity of body systems or organs

Stimulant — Speeds activity of body systems or organs

Irritant — Causes excessive cell activity; prolonged irritation depresses activity

Emollient — Coats and protects tissues

Selective — Has power to act on a certain part of the body

Principal effect — Therapeutic action most desired

Side effect — Action of a drug other than the main effect for which drug is given

Untoward — Harmful

Cumulative — Tendency to accumulate in system due to slow excretion; may be desired or undesired

Antagonistic — Opposite or counteraction of one drug to another

Synergistic — Increase in potency or decrease of side effects due to the working together of two drugs

SUPPLEMENT 8

Common Classes of Drugs and their Actions

Analgesic — Relieves pain

Anesthetic — Produces loss of feeling

NOTE: Anesthetic can be general, local, or regional.

Antacid — Neutralizes acids

Antibiotic — Destroys bacteria

NOTE: An antibiotic that is capable of killing a variety of bacteria in known as a *wide-spectrum antibiotic*.

Antipyretic — Reduces febrile temperatures

Cardiogenic — Acts directly on the heart

Depressant — Produces sedation or sleep

Diuretic — Increases the output of urine

Emetic — Induces vomiting

Hallucinogen — Produces hallucinations

Hormone — Stimulates by chemical action an increase in function or secretions; substance originates in organ or gland, then circulates in bloodstream to other organs

Hypnotic — Produces sleep; causes insensibility to pain

Narcotic — Produces sleep; relieves pain

Tranquilizer — Reduces mental tension and anxiety

SUPPLEMENT 9

Extrapyramidal Symptoms

Extrapyramidal symptoms (ESP) may appear after the administration of a single dose of psychotropics or after prolonged usage. Extrapyramidal symptoms are considered to be a rather normal consequence of drug action. There are four general types of reactions:

- Pseudoparkinsonism

  Resembles true parkinsonism and manifests symptoms such as tremor, mask-like facial expression, rigidity, drooling, loss of associated movements of the arms, and some restlessness.

- Akinesia

  Akinesia is usually less distressing to the resident and becomes evident to staff when the resident complains of fatigue and weakness of the arms and legs.

- Akathisia (motor restlessness)

  Akathisia becomes apparent when the resident is observed to be extremely restless, continually moving his hands, mouth, and body.

- Dyskinesia

  Dyskinesia is a less common disturbance that takes many forms such as torsion spasm, drooping of the head, protrusion of tongue, and other facial disturbances. Residents complain of stiff neck and inability to swallow and usually become very frightened with the onset of these symptoms.

The sudden appearance of any of these symptoms can be frightening to the resident and the staff as well. Immediate action should be instituted to reverse any extrapyramidal reaction.

The administration of an antiparkinsonian agent orally (when possible) will produce a reversal of symptoms in as dramatic a way as the onset of the symptoms.

Generally, these extrapyramidal symptoms are easily controlled by lowering the dosage or discontinuing the medication, using a compound that has a low incidence of these reactions or controlling these reactions with use of antiparkinsonian drugs. Occasionally, the symptoms persist.

SUPPLEMENT 10

CLASSIFICATION AND USE	MOST COMMON MAJOR SIDE EFFECTS	NURSING IMPLICATIONS OR POINTS FOR TEACHING
Antidepressants Monoamine Oxidase Inhibitors		
To relieve depression increase appetite and activity level **NOTE:** These drugs are very potent, toxic, and produce dangerous side effects;	Headaches, dizziness Hypertension Hypertensive crises intracranial bleeding drowsiness	Check blood pressure. Report to Physician. Do not combine with stimulant drugs such as caffeine, cold remedies, amphetamines or tricyclic antidepressants. Teach patient not to combine with foods high in tyramine, such as aged cheese, beer, wine, liver, and yeast. When discontinued from the drug, these foods or medication should not be taken for two to three weeks.
Antidepressants Tricyclics		
Produce antidepressant mild tranquilizing effects	Dry mouth and other minor symptoms Cardiac arrhythmias Hypotension Hypertension	Actually a relatively safe medication for long term use. Usually ordered to be given at night to relieve this symptom. Teach patient it takes several weeks to become effective Take vital signs, especially in persons with history of cardiac problems.

CLASSIFICATION AND USE	MOST COMMON MAJOR SIDE EFFECTS	NURSING IMPLICATIONS OR POINTS FOR TEACHING
Antimanic Lithium Compounds To control mood swings of persons with bipolar disorders (manic depression) Margin of Safety between therapeutic dose is very narrow. (See attached sheet.)	Normal side effects: Fine hand tremors, nausea Impending toxicity: Vomiting, diarrhea, muscle weakness, ataxia, polyuria Toxicity in central nervous system: Drowsiness, slurred speech, coma, convulsions, death	Check lab work. Therapeutic dose depends on patient response. (Requires about a week to ten days to be effective.) Lab work done 3 times a week for adjustments, then monthly on maintenance. Encourage patient compliance of taking medication and getting checkups. Report vomiting or diarrhea. Electrolyte imbalances may occur. Check lab work. Signs and symptoms may occur at 1.5 milliquivalents. Toxic blood levels 2.0 to 3.0 milliquivalents.
Minor Tranquilizers To relieve mild to moderate anxiety, relax tense muscles. Also given to raise the seizure threshold to prevent seizures or delirium tremens.	Habit forming. Tolerance may develop. Severe withdrawal. Convulsions, Delirium Dry mouth, Drowsiness, ataxia Cumulative effects	Get renewal order from physician every seven days. Do not withdraw the drug from persons on long term use without medical supervision. Do not drive or operate machinery. Observe for respiratory distress and central nervous system depressants. **NOTE:** Patients can easily overdose on these, and the suicidal patient should be watched carefully.

SUPPLEMENT 11

Seizures

Seizures are: involuntary muscle contractions and relaxations

Seizures indicate: a neurological disorder

Seizures *May* indicate: brain, nerve, or chemical disorders

General Guidelines for Seizures

- **Seizures can be caused by:**

  Genetic conditions
  Brain tumors
  Toxicity
  Trauma
  Circulatory disorders
  Infection (Meningitis,etc.)
  Metabolic disorder: (hypoglycemia, hypocalcemia anoxia)

- **Seizures tend to be stimulated or precipitated by:**

  Overexertion
  Inadequate rest
  Infection
  Irregular daily schedule
  Excitement
  Fever
  Excessive intake
  Flashing light patterns

- **To look for:**

  Involuntary muscle contractions and relaxations
  Loss of consciousness
  Tonic/clonic contractions
  Jacksonian seizures (localized twitching, jerking)
  Petit mal seizures (momentary cessation of activity and thought)

- **Watch for, observe and chart:**

  Factors involved in onset (locations, situation)
  Physical areas of involvement
  Severity of muscle twitching
  Length of episode
  Level of consciousness
  Sequence of movement
  Preseizure and postseizure signs and symptoms
  Light/smells/confusion/light-headed

- **Seizures — Protection from harm and environment:**

  Loosen clothing
  DO NOT restrain
  Better the floor than the bed, if possible
  Clear the area of things and people
  Something soft between the teeth, *if open*
  Do not pry open the mouth/teeth

- **Anti-Convulsants — Most common side effects:**

  Drowsiness
  Visual difficulties
  Motor incoordination
  Nervousness
  Staggering ataxia
  Gingival hyperplasia

- Procedures that will help the medication problem:

  Don't give the medications on an empty stomach. (Gastritis)
  Be conscientious about dental hygiene.
  Do blood levels as necessary.

A Guide to the Various Forms of Epilepsy, with Suggested Interventions

Type of Epilepsy	**Grand Mal**
Features	This is the most common form of epilepsy. About half of the clients will have an "aura" or warning just before a seizure. They will then have muscular contractions, a cry-like sound, may fall to the ground and become rigid or tremble, turn bluish, and lose consciousness. They may enter into a phase of muscle jerking and may urinate involuntarily. They continue to look bluish (cyanotic) in color. Subsequently, the muscles relax, and the client stops convulsing. He remains unconscious, but his color improves. At this point, the client probably will enter a normal sleep state for a period of time. He may have a headache. He probably will have no memory of the convulsion.
Duration	Anywhere from 1-3 minutes.
Interventions	Try to prevent injury to the client. If there is time, ease him to the floor to prevent head injury. Push aside any furniture the client may strike during the seizure. Looses constrictive clothing. Do not restrain the client during the seizure. If possible, place the client on his side during the seizure and afterwards, so that saliva can drain out of his mouth. If the client's seizure last unusually long, notify the physician.
Type of Epilepsy	**Petit Mal**
Features	This form of epilepsy is the most common in children and adolescents. Often it is unnoticed since the attacks may be very short (3-4 seconds) and involve only a brief lapse of consciousness, a fluttering of the eyelids, or a faltering in speech. In more severe attacks,the client may have jerking in his arms, legs or trunk, and then fall to the floor. This is followed by a short loss of consciousness.
Duration	3-4 seconds for a mild attack, up to 90 seconds for a more severe attack.

Interventions	It is important to recognize these seizures since they often can be controlled by drugs and may lead to *"Grand Mal"* seizures later on if they are not treated. In a full-blown attack, try to protect the client from head injury when he falls.
Type of Epilepsy	**Psychomotor**
Features	In this type of epilepsy, the client does not lose consciousness but is in a dream-like state and remembers little of what he does during the attack. The client may stretch out his fingers to grasp an invisible object, or turn his head as if listening to someone. Following the attack, the client resumes normal behavior.
Duration	30 second to 2 minutes.
Interventions	The important thing here is to recognize the seizures when they occur, so that the physician may be informed of them.
Type of Epilepsy	**Jacksonian**
Features	There are movements or sensations along a limb. The seizure may start with a twitch on the lip; then spread to the rest of the face, and down the arm and leg, on the same side as the twitch.
Duration	Up to 3 minutes.
Interventions	It is important to recognize and report these seizures.

SUPPLEMENT 12

	DIABETIC COMA	REGULAR INSULIN REACTION	PROTAMINE ZINC OR NPH INSULIN REACTION
Onset	SLOW (days) in adults: fairly RAPID in children	SUDDEN, RAPID (minutes): Reaction occurs in daytime	INSIDIOUS, SLOW (hours): Reaction occurs in evening
Symptoms	Weakness, mental dullness	Trembling, confusion, weakness, drowsiness, nervousness	Weakness, drowsiness, nervousness, trembling, irritability
	FREQUENTLY:	FREQUENTLY:	OCCASIONALLY:
Nausea	Vomiting	None	Vomiting
Hunger	No	Yes	Yes
Thirst	Yes	No	No
Skin	Hot, dry	Cold, Clammy	Cold, Clammy
Vision	Dim	Double	Double
Breathing	Deep/labored, air hunger	Normal or Shallow	Normal or Shallow
Abdomen	Pain	No pain	No pain
Head	Occasional headache	Rare Headache	Often Headache
Breath	Fruity odor	Normal odor	Normal odor
Consciousness	Can lose	Can Lose	Can Lose
Treatment			
Urine	Usually high sugar	Usually contain sugar	Usually sugar free
Destroxtix	High sugar	Borderline normal or low	Low sugar
	Regular insulin by doctor's order	Orange juice, maybe with sugar (fast) Dextrose IV/under direct supervision of doctor	Orange Juice, maybe with sugar, milk, bread, crackers, (long lasting)

SUPPLEMENT 13

Signs/Symptoms of Communicable Disease

Resident with signs or symptoms of contagious disease should be kept at home until fully recovered. Temperature, pulse and respiration should be checked and the body should be examined for rashes, skin eruptions, etc. The community physician, the school, the place of work, and case manager should be notified. Document all of the doctor's recommendations on the residents records as your home requires, i.e. resident's log, medical log, progress notes.

Signs/Symptoms suggestive of a communicable disease are:

- Red or running eyes
- Sneezing or nasal discharge
- Cough, particularly if persistent or productive
- Sores or crusts on the ears, scalp, face or body, particularly if red and swollen or draining
- Any skin eruption or rash
- Sore throat
- Swelling and tenderness of glands, about the face, neck or genital area
- Fever, suggested by hot, flushed face
- Nausea and/or vomiting
- Pain and stiffness of neck
- Headache
- Jaundice (yellow of whites of eyes and/or skin)
- Diarrhea and/or persistent abdominal pain
- Change of behavior, especially in non-verbal persons

Should any of the above signs or symptoms of contagious disease occur while the resident is at school or work the resident and/or school and workplace staff should be urged to notify the home immediately.

Make sure that school/work have the resident's home telephone numbers plus the telephone number and name of the resident's physician.

To prevent the spread of infectious or communicable disease, you need to break the links in the infectious process chain. There are almost as many ways as there are disease—for example:

Polio and measles vaccines	**BREAK**	Susceptible Host and Reservoir Links
Use of disposable cups and tissues	**BREAK**	Transfer Link
Eating regular, balanced meals and getting enough sleep	**BREAK**	Susceptible Host Link
Keeping foods refrigerated at 40° F or below so that microbes cannot grow	**BREAK**	Reservoir Link
Staying home when you're not well to avoid giving your "bug" to others	**BREAK**	Transfer Link

If there are *any* breaks in the infectious process chain, infection will *not* take place.

Probably the simplest and most overlooked method of preventing the spread of communicable diseases is *GOOD HANDWASHING TECHNIQUE*. Unwashed hands are the most common means of transmitting infection from one person to another, either directly or indirectly.

Effective handwashing can break the links of the infectious process chain.

Think back to this morning and consider all the different objects and surfaces your hands have touched from the time you awoke to the time you completed dressing: the alarm clock, the bedding, your body, the soap when you washed and the towels when you dried, your clothing, the drawers and closets, your shoes and socks, your hair and face, your toothbrush, breakfast dishes, the refrigerator and coffee pot....the list is endless.

In all the objects you touched, how many times did you wash your hands? How many of those objects had you used before—a razor, hairbrush, shoes—that might carry germs from other times and places? How many of those objects that you touched had been touched by someone else and would be touched after you had used them—doorknobs, sink faucets, stove controls—the list goes on. Every object and surface and person you touch becomes a reservoir, or mode-of-transfer,—or mode of entry for the microorganisms dropped off or picked up by your hands. Directly or indirectly, your hands are almost *continually* in contact with microorganisms; your hands are the means by which pathogens or disease-causing germs are most often transferred to and from one person to another, as well as, from one body part to another. Regular handwashing can break the links of the infectious process chain.

Your hand are almost continually in contact with microorganisms, your hands are the means by which most germs are spread.

Good handwashing technique is more than a quick rinse and a grab at the nearest towel. There are two basic principles for effective handwashing: *friction and rinsing*. Thorough handwashing includes rubbing (friction) with soap all the surfaces of the hands and wrists, the backs of the hands, and between the fingers. Rinsing should be done under running water, with the water flowing down from the wrist area toward the fingertips; this avoids recontaminating already clean areas of the hands. You should *never* rinse your hands in a sink of water; standing water in the sink would act as a reservoir for the same germs you are trying to wash away. Since the sink and faucets are considers "contaminated," you should take precautions to avoid touching them with clean hands. You should use a dry paper towel to turn off the faucet after you have dried your hands.

Two basic principles of effective handwashing:

1. **thorough *friction* (rubbing) of hands, wrists, backs of hands and between fingers, with soap and water.**
2. ***rinsing* only with running water.**

Good handwashing technique is something that should be shared with residents. As staff it is your responsibility to provide a safe and clean environment for the residents in your home. One way to do this is by role-modeling and teaching your residents these same techniques so they can help break the infectious process chain.

The time both residents and staff should be particularly careful to wash their hands are:

1. whenever performing a service for a resident where body contact occurs,
2. after handling a resident's personal articles,
3. before and after food preparation,
4. before and after eating,
5. after using a handkerchief or tissue,
6. after using the toilet.

***Residents* and *staff* should use good handwashing techniques.**

Microorganisms, when unchecked, can grow and multiply at an amazing rate—one microbe in 12 hours will grow to 17 million microbes....and *all* of them will fit on the head of a pin! There are 6 conditions which affect the growth of microorganisms; food, oxygen, temperature, moisture, light and darkness.

The same living conditions that are good for humans are often good for the growth of microbes.

The 6 conditions affecting the growth of bacteria are:

1. food
2. oxygen
3. temperature
4. moisture
5. light
6. darkness

Microbes reproduce best at temperature ranging from 40° - 160° F (5-70° C); in other words, room and body temperatures are ideal for bacterial growth. Many microbes grow quickly in warm, moist areas with a good oxygen supply. For example, salmonella bacteria reproduce rapidly on warm stuffing left in a turkey on the dining room table. Prompt refrigeration is one way to slow down bacterial growth.

Bacteria do especially well in warm, damp areas like the bathroom or under the kitchen sink. Good housecleaning methods, including the use of disinfectant, will destroy those same conditions necessary for growth. Special attention should be given to any area where two body surfaces touch to prevent bacterial growth.

Some bacteria grow best in the dark and without oxygen—one type is botulism, which is often found in canned food tins with bulging sides. Lack of sufficient heat in the canning process promotes the conditions needed for the botulism to thrive.

Keep in mind that a good defense against spread of microorganisms (in addition to good handwashing technique), is to deny them the conditions necessary for growth; if they need warmth, refrigerate them; if they need moisture, keep all surfaces dry; if they need oxygen, provide a vacuum (as in vacuum-sealed canned goods); if they need light, give them darkness; if they need darkness, give them light, as in plenty of sunshine; if they grow at room temperature, refrigerate or freeze or boil or bake them.

Denying bacteria the conditions necessary for growth is a means of limiting infection.

Good housekeeping techniques are an effective way to stop or prevent infection.

Conclusion

Anytime a resident develops a communicable disease, his/her school or workplace should be notified so precautions may be taken to limit its spread. All persons in the home should be especially alert to using good hygiene to reduce their chances of "catching" the disease.

Cleanliness is the best weapon to fight infections. For example, washing linens and clothing in hot, soapy water; good handwashing technique; washing, vacuuming and dusting all "environmental surfaces"; having personal hair brushes, toothbrushes, drinking glasses, etc.]

REMEMBER, it is usually easier to prevent a communicable disease from happening than to limit, treat and cure it once it occurs.

SUPPLEMENT 14

AIDS

Because of the possibility of exposure to body fluids by the direct care staff and understanding AIDS and its transmission is necessary, provided are materials from the Center for Disease Control and the American Red Cross.

Universal precautions are recommended for all residents and staff.

NEW GUIDELINES FOR PREVENTING TRANSMISSION OF THE AIDS VIRUS

For your information....and safety: A summary of the precautions you should incorporate into your daily practice.

The Centers for Disease Control (CDC) now recommends that health care workers take blood and body fluid precautions with *all* patients.

Universal precautions are especially important in emergency care settings where the risk of exposure to blood is greater and the patient's infection status is usually unknown.

Previously, the CDC recommended using such precautions only with patients known or suspected to be infected with blood-borne pathogens. But now, they acknowledge that a medical history and examination can't reliably identify all patients with human immunodeficiency virus (HIV) or other blood-borne pathogens. As a result, the CDC specifically recommends that all health care workers:

1. Wear gloves when touching blood and body fluids, mucous membranes, or broken skin of all patients. Also wear them if handling items or surfaces soiled with blood or body fluids and while performing venipunctures or other procedures that would involve vascular access. Change gloves after contact with each patient.
2. During procedures that may cause spattering of blood or other body fluids, prevent exposure to mucous membranes of the

mouth, nose and eyes. Wear masks, protective eye wear or face shields, and gowns or aprons as necessary.

3. Wash hands and other skin surfaces immediately and thoroughly if they become contaminated with blood or other body fluids. Wash your hands immediately after removing gloves.

4. Take care to prevent injuries from needles, scalpels, and other sharp instruments. Be especially careful when performing procedures, cleaning used instruments, disposing of used needles, and handling sharp instruments after procedures. To prevent needlestick injuries, don't recap, bend, or break needles; don't remove them from disposable syringes or otherwise manipulate them by hand.

5. Put used disposable syringes and needles, scalpel blades, and other sharp items in puncture-resistant containers for disposal. (Place the puncture-resistant containers as close as practical to the area where they'll be needed.) Put large-bore reusable needles in a puncture-resistant container for transport to the reprocessing area.

6. Store mouthpieces, resuscitation bags, and other ventilation devices in areas where the need for resuscitation is predictable. This will help minimize the need for emergency mouth-to-mouth resuscitation. (Saliva, however, hasn't been implicated in HIV transmission.)

SUPPLEMENT 15

Guidelines for Teaching Self-Medication

The governing body of a facility must have a policy that specifically covers teaching self-medication. Self-medication should be a long-term goal of the majority of residents who will be in a group home or residential setting.

The staff and resident should be continuously working to ward their highest level of independence. Self-medication programming is part of this independence.

Reasons for self-medication

- more convenient for resident and staff
- more economical for resident and staff
- more involvement for resident

Self-medication suggestions

- Institute self-medication programming upon instruction. (In a group home the IDT implements this decision)
- Begin self-medication with education of the resident
  - naming medication
  - reason for taking medication
  - when to take medication (times)
  - how often
- After completing education, the resident should be able to verbalize all aspects of the medications mentioned above.
- Monitor medication procedures and provide direction to resident.
- When a level of success is completed, begin a trial completion program with documentation until a 2-week trial with no error has been completed.
- Ordering medications for refills is part of self-medication. Resident should follow examples provided by staff as they order medication from the pharmacist.

Discuss safety precautions to prevent unnecessary accidents such as

- proper labeling
- follow instructions and heed warnings about operating machinery, discontinue if pulse is rapid, etc.
- check medications for expiration dates
- discard unused, deteriorated, or out of date medications
- do not share medication with others
- store properly

Monitoring medication

Medications are locked up

- Medications are locked up
- Staff reminds resident when it is time to take medication
- Positively identify recipients prior to administration of medication
    1. ask the resident his/her name
    2. if resident is non-verbal ask a third party to verify resident's identity
- Do not "force" residents to take medication against their will. (If refusal to take medications is a problem, you should consult the interdisciplinary team for assistance.) Document with an "*R*" in the appropriate space and notify the Supervisor.
- Explain to the resident why the physician ordered the medication (even if the resident is non-verbal) and what the procedure will be.
- Provide privacy if appropriate

- Observe resident in taking the medication

  1. careful observation of right dosage, drug, route, etc.

  2. give adequate water to aid in swallowing tablets, capsules, etc. A full glass is recommended. This also prevents "cheeking."

  3. If a resident has difficulties swallowing the tablets, capsules, etc., notify the physician/nurse consultant. Many medications are available in liquid form and the physician may choose to change the medication order.

- Remain with the resident until medication is swallowed.

  NOTE: Some medication is not to be swallowed, i.e., troches, lozenges, nitroglycerin

- Observe, record, and report resident's response to the medications. Resident may be capable of recording information.

  NOTE: When a resident leaves the home for work, special events, etc. a separate bottle of medication may be obtained from the pharmacist that contains smaller amounts of medication. These smaller containers can be sent with the resident for their use.

SUPPLEMENT 16

Measuring Liquid Medications

INTRODUCTION

One of the most important aspects of administering medications is making sure that the resident gets an accurate amount. When you are administering solid medications, this factor is not much of a problem. All you have to do is count the correct number of tablets or capsules. But when you are administering liquid medications, you must measure the amount accurately with a medicine glass or cup. An inaccurate measurement could harm the resident or cause a reaction.

Most liquid medications are measured either by milliliters (ml) or cubic centimeters (cc), ounces, teaspoons, or tablespoons. Most medicine glasses are marked with both metric and English (household) units. If, however, you use one that does not have both, you can easily find equivalent amounts, as shown in the table below.

1 milliliter (ml) = 1 cubic centimeter (cc)
5 ml = 1 teaspoon (tsp)
15 ml = 1/2 ounce (oz)
15 ml = 1 tablespoon (tbsp)
30 ml = 1 oz
30 ml = 2 tbsp
3 teaspoons = 1 tablespoon

GUIDELINES

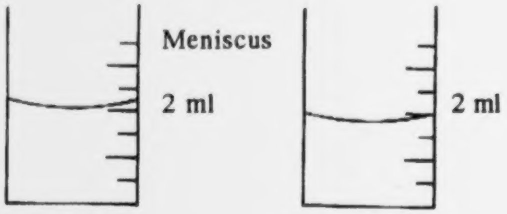
- Always measure liquids to the bottom of the meniscus
- Never pour extra medication back into the bottle
- Never use an "eating" spoon to measure medications
- Always wash the measuring device after using it

EQUIPMENT AND MATERIALS

- Medicine glass or cup and other measuring devices
- Colored water or other liquid

PROCEDURE

1. Check medication label for dosage
2. Open medication bottle
3. Find the proper mark on the measuring cup or glass
4. Place your thumbnail on the mark
5. Hold the medicine glass or cup at eye level
6. Pour the medication so that the meniscus lines up with the proper mark



Accurate 2 ml

Inaccurate 2ml

NOTE: Hold the medicine bottle with the label facing your palm so that medication does not run down the label.

CAUTION

If you accidentally pour too much, do not pour the excess back into the medicine bottle. Pour it down a sink.

7. Wipe off the outside of the bottle with a clean paper towel and replace the cap

PRACTICE EXERCISES

Compute the equivalents for the following amounts:

3 tsp = ________ ml = ________oz

1 tsp = __________cc = ________ml

1/2 oz = ________ml = ________tsp

1 oz = _________tsp = ________ml

1 tbsp = ________ml = ________tsp

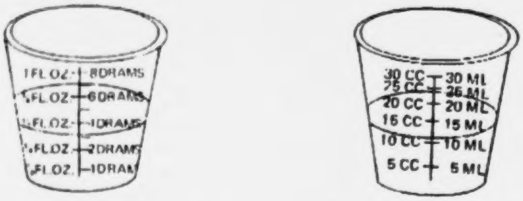
OBJECTIVE 6

Administer Oral Medications

INTRODUCTION AND GUIDELINES

Oral medication may be a tablet, a capsule, or a liquid, and it may be given in one of several ways. It may be swallowed, it may be allowed to dissolve under the tongue (sublingual), or it may be allowed to dissolve next to the cheek (buccal). The way it is given is not a choice for you or the resident to make; you and the resident must follow the physician's orders.

If oral medication is in liquid form, you will have to measure the liquid carefully into a medicine glass or other measuring utensil.



Measurements usually found on a medicine glass

- Follow guidelines given in Student Supplement 2, "Guidelines for Giving Medications"
- Follow exactly the physician's instructions on medication label, including whether to give fluids (water, milk, fruit juice?) to help swallow solid medications or whether to mix crushed tablets with soft foods, ice cream, etc.
- Mix liquid or crushed medication with a semisolid food such as applesauce or gelatin for residents who have difficulty swallowing tablets or capsules and whose diet permits those foods
- Explain to the resident in simple terms what you are going to do and what you want the resident to do
- Position resident to make swallowing easy

NOTE: Some residents may have to be helped into special positions for taking oral medications. Check the care plan for specific instructions.

- Pour glass of water, if allowed, before giving resident the medication so that it will be ready when needed
- For a resident who has trouble swallowing tablets, give a sip of water before the tablet
- Except with cough medicines or unless the label or care plan advises against taking fluids with the medication, give the resident one-half to a whole glass of water after the medication
- Never dilute cough medicine; after taking it, resident should avoid eating or drinking anything for 15 to 30 minutes to get the most benefit from medication
- Give resident liquid medication with a straw if necessary or desired

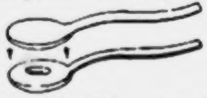
NOTE: Some types of medications—such as iron and acid—may discolor or destroy tooth enamel over a long period of time if they are allowed direct contact with the teeth.

An Alternative for Reluctant Pill Swallowers

For whatever the reason, some people simply cannot swallow pills. Are they forever destined to take liquid medications or injections?

The answer is...no. There is another way: crushed tablets. You can crush a pill or tablet by pounding it, using mortar and pestle or some substitute.

You can also crush a pill or tablet by placing it in the bowl of a spoon, placing the bowl of another spoon on top of it, and pressing the two bowls together firmly.



The crushed tablet can be mixed with an easy-to-swallow food such as applesauce. Your resident now will have an easier time taking tablet-type medication.

Do check the care plan and check with the primary caregiver before using this method of giving oral medications. Some foods may not be suitable for your resident. Always follow what is appropriate for the resident.

- Give liquid medications slowly
- Avoid touching the medication itself; pour tablets or capsules into lid of medicine bottle or into a medicine cup, not into your hand
- Count accurately the number of tablets or capsules your resident is to receive
- Avoid scraping resident's teeth with the medicine glass or other measuring utensil
- If resident is taking more than one medication, give the more important medication first
- In general, give only one medication at a time; allow a moment of rest between each, especially for elderly residents or children

  NOTE: Ask resident if he or she prefers taking all pills at once or singularly.

- If you suspect that the resident has not swallowed the medication, you can encourage the resident to talk, or press gently on resident's lower jaw to open the mouth for you to see inside the mouth

Reluctant Pill Swallowers
(Continued)

What about capsules? Can you crush a capsule for someone who cannot swallow pills?

Crushing is not necessary. Many times a capsule is used only because the medication itself is not pleasant tasting. If your resident would rather risk an unpleasant taste than swallow a capsule, you can open the capsule.

In some cases you can disguise the medication's taste. For example, you can mix the medication with a soft food such as applesauce, or mix it with a little bit of syrup or honey diluted with a small amount of water. Follow the guidelines in your resident's care plan.

You do not want to crush timed-release medication or enteric-coated tablets because you would probably crush the coating that makes it slow to dissolve.

EQUIPMENT AND MATERIALS

For a liquid medication

- Bottle of medication
- Medicine glass, needleless syringe, eyedropper with graduated markings, or other measuring utensil

PROCEDURE

1. Check care plan, medical consent form, and medical release form before administering any medication

2. Wash hands

3. Obtain bottle of medication and medicine glass

4. Check label for "rights" of medication

   a. Right person
   b. Right medication
   c. Right dosage form
   d. Right amount
   e. Right route of administration
   f. Right time and date

5. Explain procedure to resident

6. Position resident to make swallowing easy

   WARNING
   Review care plan for proper positioning for your resident.

7. Prepare dosage

   a. Shake liquid medication, if needed, before measuring

   b. If you are using a medicine glass:

      1) Place thumbnail on medicine glass at the correct dosage level to mark how much liquid to pour

      2) Hold medicine glass straight and at eye level when measuring liquids

      3) Pour from side opposite label to avoid soiling label

      4) Wipe neck of bottle, if necessary, after pouring liquid

c. If you are using an oral (needleless) syringe:

    1) Put tip of syringe into liquid medication

    2) Holding syringe with one hand, pull back plunger with other hand until liquid fills barrel of syringe to the correct dosage

        NOTE If an air bubble is in the syringe, push it out and remeasure.

    3) Remove syringe from bottle

d. If you are using an eyedropper:

    1) Put tip of eyedropper into liquid medication, squeeze bulb

    2) Release bulb so that liquid can fill barrel of eyedropper to correct dosage

    3) Remove eyedropper from liquid

8. Give medication to resident

    a. If you are using a medicine glass:

        1) Hand medicine glass to resident; assist resident as needed

            NOTE You may need to remind some residents to tilt back the head slightly as they tilt up the medicine glass.

        2) Instruct resident to swallow the medication; remain with resident until medication is taken

        3) Remove bottle of medication and medicine glass

    b. If you are using a needleless syringe or an eyedropper with graduated markings:

        1) Place tip of syringe/eyedropper between the inside of resident's cheek and the tongue

        2) Press plunger/bulb slowly to release medication

        3) Assist resident as needed to encourage swallowing

    c. Stroke resident's neck to encourage swallowing

9. Observe resident for side effects such as drowsiness, nausea, or hyperactivity

10. Document type of medication, time administered, and any side effects

11. Store medication

    a. Remove bottle of medication and medicine glass or needleless syringe/eyedropper

    b. Return medication to proper storage

    c. Wash or dispose of syringe/eyedropper

12. Clear area of equipment

13. Wash hands

EQUIPMENT AND MATERIALS

For pill medication to be swallowed

- Bottle of medication
- Glass of water (or fruit juice if allowed with medication)

PROCEDURE

1. Check care plan, medical consent form, and medical release form before you administer any medication

2. Wash hands

3. Take bottle of medication and glass of water to resident

4. Check label for "rights" of medication

    a. Right person
    b. Right medication
    c. Right dosage form
    d. Right amount
    e. Right route of administration
    f. Right time and date

5. Explain procedure to resident

6. Position resident to make swallowing easy

   NOTE Check care plan for proper positioning for your resident.

7. Pour correct number of tablets or capsules into lid of medicine bottle

8. Give medication and glass of water to resident

9. Instruct resident to chew pill if indicated on label

10. Instruct resident to swallow medication with the water

11. Remain with resident until medication is taken

12. Observe resident for side effects such as drowsiness, nausea, or hyperactivity

13. Document type of medication, time administered, and any side effects

14. Store medication in proper place

15. Clear area of equipment; wash glass

16. Wash hands

EQUIPMENT

For sublingual or buccal medications

- Bottle of medication
- Clean, disposable gloves

PROCEDURE

1. Check care plan, medical consent form, and medical release form

2. Wash hands

3. Obtain bottle of medication

4. Check label for "rights" of medication

    a. Right person
    b. Right medication
    c. Right dosage form
    d. Right amount
    e. Right route of administration
    f. Right time and date

5. Explain procedure to resident

6. Position resident

7. Put on gloves

8. Pour correct amount of medication into lid of bottle

9. Assist resident as needed to place medication under resident's tongue (sublingual) or between the gum and cheek (buccal)

10. Remain with resident until medication dissolves

11. Observe resident for side effects

12. Remove and dispose of gloves

13. Document type of medication, time administered, and any side effects

14. Return bottle of medication to correct storage

15. Clear area of equipment

16. Wash hands

EQUIPMENT

For Inhalants

- Inhaler or atomizer
- Stopwatch, timer, or watch with second hand

PROCEDURE

1. Check care plan, medical consent form, and medical release form before administering any medication

2. Wash hands

3. Obtain atomizer

4. Check label for "rights" of medication

   a. Right person
   b. Right medication
   c. Right dosage form
   d. Right amount
   e. Right route of administration
   f. Right time and date

5. Explain to resident exactly what you are going to do or what you want the resident to do

6. Help resident into an upright position

7. Shake the atomizer well

   NOTE: Do not test spray the atomizer; doing so will reduce the number of doses the resident receives.

8. Instruct the resident to exhale or breathe out fully

9. IMMEDIATELY place the mouthpiece over the resident's tongue and well into resident's mouth, making sure that resident's lips seal tightly around the mouthpiece

10. As you press the atomizer between your thumb and forefinger, have the resident breathe in deeply through his or her mouth. You may have to seal the nostrils by gently pinching them between your thumb and forefinger

11. Have the resident continue inhaling deeply so that the medicine goes deep into the lungs

12. Remove the atomizer from the resident's mouth, have him or her breathe out gently

13. Wait 60 seconds before the second puff and repeat steps 7-12

14. Observe resident for side effects

15. Document type of medication, time administered, and any side effects

16. Replace atomizer in proper place

17. Clear area of equipment

18. Wash hands

OBJECTIVE 7

Administer topical medications

INTRODUCTION AND GUIDELINES

A topical, or local, medication is applied to a specific area of the body to treat an infection, relieve pain, or cleanse a wound. Lotions, ointments, and medicated dressings are all examples of topical medications.

Some topical medications are spread on dressings that are then applied to affected areas. Some medications are spread directly on the skin; some are to be rubbed in vigorously; some liquids are allowed to wash over or flow through a body part. Follow the directions for your resident's medication. If your resident is a child, cover the medication to keep the child from eating the medication.

EQUIPMENT AND MATERIALS

For medicated wet dressings

- Medicated solution
- Basin
- Dressings
- Bed protector if needed
- Clean or sterile gloves as needed
- Tray for equipment

PROCEDURE

1. Check care plan, medical consent form, and medical release form before giving any kind of medication

2. Wash hands

3. Assemble equipment

4. Check "rights" of medication

   a. Right person
   b. Right medication
   c. Right dosage form
   d. Right amount
   e. Right route of administration
   f. Right time and date

5. Prepare solution according to directions
6. Explain procedure to resident
7. Provide privacy
8. Place bed protectors, if needed
9. Position resident as needed for application of dressings
10. Put on gloves
11. Saturate dressing with medication; press out excess moisture so that dressing is uniformly moistened but not wet enough to drip
12. Place moistened dressing on resident
13. Wrap the affected part loosely, just enough to hold moistened dressing in place; do not cover wet dressing unless indicated by instructions
14. Provide additional cover as needed
15. Check dressings often during treatment; remove and reapply as often as needed to maintain moisture
16. Each time dressings are removed, observe affected area for symptoms of irritation
17. Remove dressings at end of treatment
18. Pat skin dry, using as little friction as possible
19. Apply dry dressing as required
20. Remove gloves
21. Provide for resident comfort
22. Observe resident for any side effects
23. Document type of medication, time administered, and any side effects

24. Return equipment to storage

25. Dispose of used dressings

26. Wash hands

EQUIPMENT AND MATERIALS

For other topical medications

- Medication
- Dressings, if required
- Clean or sterile gloves as needed
- Tongue depressors, cotton swabs, or cotton balls, or other applicators
- Tray for equipment

PROCEDURE

1. Check care plan, medical consent form, and medical release form before giving any medication

2. Wash hands

3. Assemble equipment

4. Check "rights" of medication

    a. Right person
    b. Right medication
    c. Right dosage form
    d. Right amount
    e. Right route of administration
    f. Right time and date

5. Check directions to determine

    a. If dressings are needed
    b. If gloves are needed
    c. Method of application
    d. If medication is to be applied sparingly or generously

6. Explain procedure to resident

7. Provide privacy

8. Place bed protectors, if needed

9. Position resident
10. Expose area to be treated
11. Put on gloves, if needed
12. Apply medication according to directions, using tongue depressors, cotton swabs, or cotton balls as needed
13. Apply dressing, if needed or if resident is a child
14. Provide for resident comfort
15. Remove gloves
16. Observe resident for side effects
17. Document type of medication, time administered, and any side effects
18. Dispose of used supplies such as dressings, gloves, tongue depressors, cotton swabs
19. Wash hands

OBJECTIVE 8

Administer eye, ear, and nose medications

INTRODUCTION AND GUIDELINES

A number of medications are administered by placing them directly on the affected area. Eye drops, ear medications, and nasal sprays all fall into this category. Although these medications are administered outside of the body, they are still an important part of the resident's care plan and should be administered with as much care as any other medication.

Eye medications

The most important consideration when administering eye medications is to use aseptic technique. Your hands, the medication, the dispenser, and all supplies used in giving eye medications must be free of germs. An infection of the eye can be quite dangerous and can result in loss of vision.

- Make sure any drug that you use for the eye is clearly marked "for ophthalmic use" before you administer it
- If resident is an infant, use sterile cotton balls to help open the infant's eyelids
- Avoid using eyecups; they can spread infection easily

Ear medications

- Hold or have resident hold bottle of eardrops in hands for a few minutes to warm medication to body temperature before inserting; cold eardrops can cause pain, nausea, and vomiting
- Do not allow the dropper to touch any part of the ear
- Do not put dropper into the ear
- Do not use cotton ear plugs unless specified on care plan or medication label; if they are ordered, do not pack plugs tightly in the ears

Nose medications

- Avoid cross-contamination of germs by giving your resident nose drops only from his or her own bottle of nasal solution

- Do not use oily nose drops for a child; child may breathe the drops into the lungs

EQUIPMENT AND MATERIALS

- Medication
- Tissues
- Cotton balls
- Pillow

PROCEDURE

For eye medications

1. Check care plan, medical consent form, and medical release form before administering any medication

2. Wash hands

3. Obtain medication and tissues

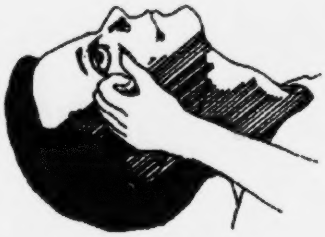
4. Check label for "rights" of medication

   a. Right person
   b. Right medication
   c. Right dosage form
   d. Right amount
   e. Right route of administration
   f. Right time and date

5. Explain to resident exactly what you are going to do or what you want resident to do

6. Have resident tilt head back for ease of instillation

7. With forefinger or thumb of one hand, pull lower eyelid down very gently. Do not press on eyeball.



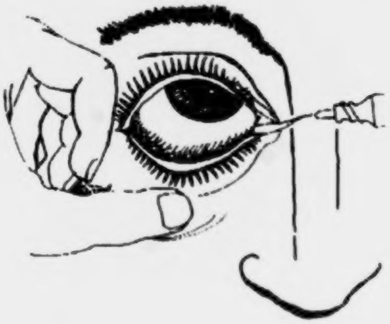
8. Have resident look upward to remove the sensitive cornea from the point of instillation

9. Approaching the eye from below resident's field of vision, hold dropper about one inch above eye

   NOTE: You may steady your hand against resident's forehead if necessary.

10. Place prescribed drops in the corner of the eye closest to the nose. If ointment is used, place a line of ointment along the lower eyelid.

    WARNING
    Do not allow dispenser to touch eye.



11. Have resident close eye

12. Wipe excess drops from resident's face with tissue

    NOTE: If eyes begin to water, blot. DO NOT RUB; rubbing will cause further irritation and may wipe away needed medication.

13. Apply dressing, if directed

14. Provide for resident's comfort

15. Advise resident not to rub eye, although moving eye under closed eyelid is all right

16. Observe resident for side effects

17. Document type of medication, time administered, and any side effects

18. Return equipment to its proper place

19. Clean area

20. Wash hands

PROCEDURE

For ear medications

1. Check care plan, medical consent form, and medical release form before administering any medication

2. Wash hands

3. Obtain medication and tissues

4. Check label for "rights" of medication

   a. Right person
   b. Right medication
   c. Right dosage form
   d. Right amount
   e. Right route of administration
   f. Right time and date

5. Explain procedure to resident

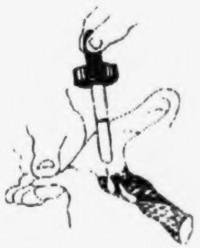
6. Position resident by turning head so that the ear being treated faces upward

7. Shake bottle of medication, if needed

8. If you are using a medicine dropper, place tip of barrel in solution, squeeze bulb until solution fills barrel of dropper to proper dosage

9. Pull upper ear gently to expose orifice

10. Squeeze bulb gently to drop medication against the internal wall of canal



11. If ordered, place small cotton ball in outer ear to cover orifice

    NOTE: Do not pack cotton ball tightly in the ear.

12. Have resident lie on his or her side for a few minutes for the drops to reach the eardrum

13. Provide for resident's comfort

14. Observe resident for side effects

15. Document type of medication, time administered, and any side effects

16. Store medication

17. Clean area

18. Wash hands

PROCEDURE

For nose instillations

1. Check care plan, medical consent form, and medical release form before administering any medication

2. Wash hands

   NOTE If resident is an infant or small child and the nose is congested, suction the nose before instilling drops.

3. Obtain medication, tissues, and a pillow

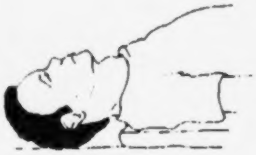
4. Check label for "rights" of medication

   a. Right person
   b. Right medication
   c. Right dosage form
   d. Right amount
   e. Right route of administration
   f. Right time and date

5. Explain procedure to resident

6. Have resident gently blow his or her nose

7. Have resident lie down with shoulders on a pillow



NOTE: Check care plan for any special positioning for your resident.

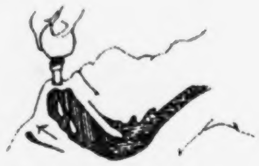
8. Shake medication if necessary

9. If you are using a medicine dropper, place tip of dropper into solution, squeeze bulb until proper dosage is in barrel of dropper

10. Ask resident to breathe through the mouth while you instill the drops

11. Holding dispenser 1/3 to 1/2 inch inside nasal passage, squeeze bulb gently to instill liquid slowly, drop by drop

    NOTE: Avoid touching nostril with dispenser.



12. Have resident remain a few minutes with head tilted back to allow medication to be absorbed

13. Provide for resident's comfort

14. Advise resident not to blow his or her nose for at least 5 minutes

15. Observe resident for side effects

16. Document type of medication, time administered, and any side effects

17. Store medication

18. Clean area, return equipment

19. Wash hands

TEST

MEDICATION ADMINISTRATION TECHNICIAN
ADMINISTER MEDICATIONS

PART I

Name________________________________**Score**___________

OBJECTIVE 1

List the "rights" of medication. Write your answers in the spaces provided below. To show mastery in this objective, you must list all seven "rights".

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

g. ____

OBJECTIVE 2

List five guidelines for storing medications. To show mastery on this objective, you must list four of five guidelines correctly.

a. ____

b. ____

c. ____

d. ____

e. ____

OBJECTIVE 3

List five purposes of medication.

a. ____

b. ____

c. ____

d. ____________________

e. ____________________

OBJECTIVE 4 List five factors that affect drug metabolism.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

OBJECTIVE 5 Document administration of medication given during Part II, the performance part of the test. Document on the form provided by the instructor. The form should be one used by a local facility. You must correctly document all of the procedures.

OBJECTIVE 6-8 Your instructor will provide you with one or more assignments that involve procedures in administering medications. You will be required to go through all steps required to complete the procedures.

Your score in this evaluation will be based on your abilities to identify required procedures and complete them accurately. Your performance will be evaluated by your instructor, using industry standards. The tasks you perform will require you to use knowledge and skills you learned in this and previously studied units.

Your assignment(s) are listed below and will be further explained by your instructor.

	Procedure Assignment	Date Completed
OBJECTIVE 6	____________	____________
OBJECTIVE 7	____________	____________
OBJECTIVE 8	____________	____________

TEST
I - 125

Patient
Admission Number
Home Number
Attending Physician
Phone Number
Admission Date
Diet
Current Date

STAFF'S SIGNATURES AND INSTRUCTIONS ON REVERSE SIDE

Medication	Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	39	30	31

This area for Special Instruction

	Initials	STAFF'S SIGNATURE		Initials	STAFF'S SIGNATURE	INDICATE INJECTION SITE WITH APPROPRIATE NUMBER
1			8			1. Buttocks (Gluteous) Left 2. Buttocks (Gluteous) Right 3. Arm (Deltoid) Left 4. Arm (Deltoid) Right 5. Thigh (Quadraceps) Left 6. Thigh (Quadraceps) Right 7. Abdomen Left 8. Abdomen Right
2			9			
3			10			
4			11			
5			12			
6			13			
7			14			

Date	Hour	MEDICATION & DOSAGE	Route	REASON	RESULT OR RESPONSE	Hour	SIGNATURE

R - Refused
H - Held at Doctor's Request
A - Resident out ot Facility
O - Resident out of Medication

W - Resident at Work
DC - Discontinue
WEIGHT: _____ BLOOD PRESSURE: ______

TEST
I - 128

ANSWERS TO TEST

MEDICATION ADMINISTRATION TECHNICIAN
ADMINISTER MEDICATIONS

OBJECTIVE 1

a. Right person
b. Right medication
c. Right dosage form
d. Right amount
e. Right route of administration
f. Right time and date
g. Right charting

OBJECTIVE 2

Return medicine to storage directly after administering the medications.

Unless otherwise stated, store most drugs at room temperature (59-86 F). Drugs stored at higher temperatures for long periods of time may deteriorate and lose their effectiveness.

Use a refrigerator for medications that require cold or cool storage (36-46 F).

Keep medication tightly capped in their original containers; many drugs are sensitive to light and are packaged in light-resistant containers.

Excessive moisture (humidity) can reduce the shelf life of many drugs. Keep drugs in a dry place such as an airtight container. Do not remove the drying packets from medicine containers that have them.

OBJECTIVE 3

a. Prevention
b. Treatment
c. Diagnosis
d. Replacement
e. Cure

OBJECTIVE 4

a. Age
b. Body size
c. Gender
d. Resident's belief in effectiveness of medication
e. Resident's ability to utilize the drug

OBJECTIVES 5-8

Evaluated to the satisfaction of the instructor

EVALUATION FORM 1

MEDICATION ADMINISTRATION TECHNICIAN
ADMINISTER MEDICATIONS

Name ______________________________

PROCEDURE **Administer oral medication (liquid)**

EQUIPMENT

- Bottle of medication
- Medicine glass, needleless syringe, eyedropper with graduated markings, or other measuring utensil

Did the student:	Yes	No
1. Check care plan, medical consent form, and medical release form		
2. Wash hands		
3. Obtain bottle of medication and medicine glass		
4. Check label for "rights"		
5. Explain procedure to resident		
6. Position resident to make swallowing easy		
7. Prepare dosage		
8. Give medication to resident		
9. Observe for side effects		
10. Document		
11. Store medication		
12. Clear area of equipment		
13. Wash hands		
14. Use proper body mechanics		

The student has satisfactorily completed the procedure "Administer Oral Medications" according to the steps outlined.

______________ ______________________________

(Date) (Evaluator's Signature)

____

(Evaluator's Position)

EVALUATION FORM 2

MEDICATION ADMINISTRATION TECHNICIAN
ADMINISTER MEDICATIONS

Name ______________________________

PROCEDURE **Administer oral medication (pill)**

EQUIPMENT

- Bottle of medication
- Glass of water

Did the student:	Yes	No
1. Check care plan, medical consent form, and medical release form	☐	☐
2. Wash hands	☐	☐
3. Obtain bottle of medication and glass of water	☐	☐
4. Check label for "rights"	☐	☐
5. Explain procedure to resident	☐	☐
6. Position resident to make swallowing easy	☐	☐
7. Pour correct number of tablets or capsules into lid of medicine bottle	☐	☐
8. Give medication and glass of water to resident	☐	☐
9. Instruct resident to chew pill if indicated on label	☐	☐
10. Instruct resident to swallow medication	☐	☐
11. Remain with resident until medication is taken	☐	☐
12. Observe for side effects	☐	☐

Did the student:	Yes	No
13. Document		
14. Store medication in proper place		
15. Clear area of equipment; wash glass		
16. Wash hands		
17. Use proper body mechanics		

The student has satisfactorily completed the procedure "Administer Oral Medications" according to the steps outlined.

_________ (Date)

_________________________ (Evaluator's Signature)

_________________________ (Evaluator's Position)

EVALUATION FORM 3

MEDICATION ADMINISTRATION TECHNICIAN
ADMINISTER MEDICATIONS

Name ______________________________

PROCEDURE **Administer oral medication (sublingual or buccal)**

EQUIPMENT

- Bottle of medication
- Clean, disposable gloves

Did the student:	Yes	No
1. Check care plan, medical consent form, and medical release form		
2. Wash hands		
3. Obtain bottle of medication		
4. Check label for "rights"		
5. Explain procedure to resident		
6. Put on gloves		
7. Pour correct amount of medication into lid of bottle		
8. Assist resident to put medication under tongue or between gum and cheek		
9. Remain with resident until medication dissolves		
10. Observe for side effects		
11. Remove and dispose of gloves		
12. Document		
13. Store medication		
14. Clear area of equipment		

Did the student:	Yes	No
15. Wash hands	☐	☐
16. Use proper body mechanics	☐	☐

The student has satisfactorily completed the procedure "Administer Oral Medications" according to the steps outlined.

(Date) (Evaluator's Signature)

(Evaluator's Position)

EVALUATION FORM 4	**MEDICATION ADMINISTRATION TECHNICIAN** **ADMINISTER MEDICATIONS**

Name ______________________________

PROCEDURE **Administer oral medication (inhalants)**

EQUIPMENT

- Inhaler or atomizer
- Stopwatch, timer, or watch with second hand

Did the student:	Yes	No
1. Check care plan, medical consent form, and medical release form		
2. Wash hands		
3. Obtain atomizer		
4. Check label for "rights"		
5. Explain procedure to resident		
6. Help resident into upright position		
7. Shake atomizer well		
8. Instruct resident to exhale		
9. IMMEDIATELY place mouthpiece over resident's tongue and well into mouth		
10. Press atomizer between thumb and forefinger while having resident breathe deeply through the mouth		
11. Have resident continue to inhale deeply		
12. Remove atomizer and have resident breathe out gently		
13. Repeat steps 7-12 after 60 seconds		

Did the student:	Yes	No
14. Observe for side effects		
15. Document		
16. Replace atomizer		
17. Clear area of equipment		
18. Wash hands		

The student has satisfactorily completed the procedure "Administer Oral Medications" according to the steps outlined.

(Date) (Evaluator's Signature)

(Evaluator's Position)

EVALUATION FORM 5

MEDICATION ADMINISTRATION TECHNICIAN
ADMINISTER MEDICATIONS

Name ____

PROCEDURE **Administer topical medication (medicated wet dressing)**

EQUIPMENT

- Medicated solution
- Basin
- Dressings
- Bed protector if needed
- Clean or sterile gloves as needed
- Tray for equipment

Did the student:	Yes	No
1. Check care plan, medical consent form, and medical release form		
2. Wash hands		
3. Assemble equipment		
4. Check "rights" of medication		
5. Prepare solution according to directions		
6. Explain procedure to resident		
7. Provide privacy		
8. Place bed protectors, if needed		
9. Position resident, as needed		
10. Put on gloves		
11. Put medication on dressing		
12. Place moistened dressing on resident		
13. Wrap affected part		
14. Provide additional cover, as needed		

Did the student:	Yes	No
15. Check dressings often, removing and reapplying as needed to maintain moisture		
16. Check for irritation each time dressings are removed		
17. Remove dressings at end of treatment		
18. Pat skin dry		
19. Apply dry dressing as required		
20. Remove gloves		
21. Provide for resident comfort		
22. Observe resident for side effects		
23. Document		
24. Return equipment to storage		
25. Dispose of used dressings		
26. Wash hands		
27. Use proper body mechanics		

The student has satisfactorily completed the procedure "Administer Topical Medications" according to the steps outlined.

_________ (Date)

_________________________ (Evaluator's Signature)

_________________________ (Evaluator's Position)

EVALUATION FORM 6

MEDICATION ADMINISTRATION TECHNICIAN
ADMINISTER MEDICATIONS

Name ______________________________

PROCEDURE **Administer topical medication (others)**

EQUIPMENT

- Medication
- Dressings if required
- Clean or sterile gloves as needed
- Tongue depressors, cotton swabs, or cotton balls, or other applicators
- Tray for equipment

Did the student:	Yes	No
1. Check care plan, medical consent form, and medical release form		
2. Wash hands		
3. Assemble equipment		
4. Check "rights" of medication		
5. Check directions		
6. Explain procedure to resident		
7. Provide privacy		
8. Place bed protectors, if needed		
9. Position resident		
10. Expose area to be treated		
11. Put on gloves, if needed		
12. Apply medication according to directions		
13. Apply dressing, if needed		
14. Provide for resident comfort		

Did the student:	Yes	No
15. Remove gloves		
16. Observe resident for side effects		
17. Document		
18. Dispose of used supplies		
19. Wash hands		
20. Use proper body mechanics		

The student has satisfactorily completed the procedure "Administer Topical Medications" according to the steps outlined.

(Date) (Evaluator's Signature)

(Evaluator's Position)

EVALUATION FORM 7

MEDICATION ADMINISTRATION TECHNICIAN
ADMINISTER MEDICATIONS

Name ______________________________

PROCEDURE **Administer eye medication**

EQUIPMENT

- Medication
- Tissues
- Cotton balls
- Pillow

Did the student:	Yes	No
1. Check care plan, medical consent form, and medical release form		
2. Wash hands		
3. Obtain medication and tissues		
4. Check label for "rights"		
5. Explain procedure to resident		
6. Position resident for ease of instillation		
7. Pull lower eyelid down with forefinger or thumb		
8. Have resident look upward		
9. Approaching eye from below resident's field of vision, hold dropper about one inch above eye		
10. Place drops in corner of eye, or place a line of ointment along lower eyelid		
11. Have resident close eye		
12. Wipe excess drops from resident's face		

Did the student:	Yes	No
13. Apply dressing, if directed		
14. Provide for resident's comfort		
15. Advise resident not to rub eye		
16. Observe resident for side effects		
17. Document		
18. Return equipment		
19. Clean area		
21. Wash hands		
22. Use proper body mechanics		

The student has satisfactorily completed the procedure "Administer Eye Medications" according to the steps outlined.

(Date) (Evaluator's Signature)

(Evaluator's Position)

EVALUATION FORM 8

MEDICATION ADMINISTRATION TECHNICIAN
ADMINISTER MEDICATIONS

Name ____

PROCEDURE **Administer ear medication**

EQUIPMENT

- Medication
- Tissues
- Cotton balls

Did the student:	Yes	No
1. Check care plan, medical consent form, and medical release form		
2. Wash hands		
3. Obtain medication and tissues		
4. Check label for "rights"		
5. Explain procedure to resident		
6. Position resident		
7. Shake bottle of medication, if needed		
8. Place tip of medicine dropper in solution, squeezing bulb until solution fills barrel of dropper to correct dosage		
9. Expose orifice		
10. Squeeze bulb gently to drop medication against internal wall of canal		
11. Place cotton ball in outer ear only if ordered		
12. Have resident lie on side for a few minutes		
13. Provide for resident comfort		

Did the student:	Yes	No
14. Observe resident for side effects		
15. Document		
16. Store medication		
17. Clean area		
18. Wash hands		
19. Use proper body mechanics		

The student has satisfactorily completed the procedure "Administer Ear Medications" according to the steps outlined.

(Date) (Evaluator's Signature)

(Evaluator's Position)

EVALUATION FORM 9

MEDICATION ADMINISTRATION TECHNICIAN
ADMINISTER MEDICATIONS

Name ______________________________

PROCEDURE **Administer nose medication**

EQUIPMENT
- Medication
- Tissues
- Pillow

Did the student:

	Yes	No
1. Check care plan, medical consent form, and medical release form		
2. Wash hands		
3. Obtain medication, tissues, and pillow		
4. Check label for "rights"		
5. Explain procedure to resident		
6. Have resident gently blow nose		
7. Have resident lie down with shoulders on pillow		
8. Shake bottle of medication, if needed		
9. Place tip of medicine dropper in solution, squeezing bulb until solution fills barrel of dropper to correct dosage		
10. Have resident breathe through the mouth while you instill drops		
11. Hold dispenser 1/3 to 1/2 inch inside nasal passage and squeeze bulb gently to instill liquid drop by drop		
12. Have resident remain with head tilted back for a few minutes		

Did the student:	Yes	No
13. Provide for resident comfort		
14. Advise resident not to blow nose for at least 5 minutes		
15. Observe resident for side effects		
16. Document		
17. Store medication		
18. Clean area		
19. Wash hands		
20. Use proper body mechanics		

The student has satisfactorily completed the procedure "Administer Nose Medications" according to the steps outlined.

(Date) (Evaluator's Signature)

(Evaluator's Position)

OBJECTIVE SHEET

MEDICATION ADMINISTRATION TECHNICIAN
OBTAIN VITAL SIGNS

INTRODUCTION

Vital signs include temperature, pulse, respirations, and blood pressure. Measuring vital signs helps detect any change in normal body functions or helps determine a resident's response to a treatment such as medication, exercise, etc. As a medication administration technician, you may need to take and record vital signs. Vital signs can detect life-threatening situations; they even reflect minor changes in a resident's condition. They must be measured, reported, and recorded accurately. You must do each of these procedures accurately and document this information correctly in the resident's record.

UNIT OBJECTIVE

After completing this unit, you should be able to take vital signs and record the information accurately.

SPECIFIC OBJECTIVES

After completing this unit, you should be able to

1. Obtain temperature readings.
2. Take pulse and respiration.
3. Take blood pressure.
4. Record vital signs information.

UNIT CONTENTS

- Objective sheet
- Instructor's guide
- Instructor's supplements

  Supplement 1 — Pretest

  Supplement 2 — Answers to Pretest
- Information sheet
- Assignment sheets

  Assignment Sheet 1 — Record Vital Signs Information
- Answers to assignment sheet
- Procedure sheets

  Procedure Sheet 1 — Clean a Mercury Thermometer

  Procedure Sheet 2 — Shake Down a Mercury Thermometer

  Procedure Sheet 3 — Take an Oral Temperature

  Procedure Sheet 4 — Take an Axillary Temperature

  Procedure Sheet 5 — Take a Rectal Temperature

  Procedure Sheet 6 — Take Pulse and Respirations

  Procedure Sheet 7 — Take Blood Pressure
- Activity sheets

  Activity Sheet 1 — Read Mercury Thermometers

  Activity Sheet 2 — Read Sphygmomanometer Gauges
- Answers to activity sheets

- Test
- Answers to test
- Evaluation forms

SUGGESTED ACTIVITIES

- **Review unit and plan presentation.**
  1. Study the specific objectives to determine those you will cover in your presentation. Decide also which objectives should be taught to which students.
  2. Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
  3. Review teaching suggestions and plan classroom activities.
  4. Determine how you will schedule time for students to demonstrate competence in the required procedures.

- **Obtain materials needed to supplement unit.**
  1. Films or videos on taking vital signs
  2. Posters and charts
     a. Normal ranges of temperature, pulse, respirations, blood pressure
     b. Conversion tables of Fahrenheit and Celsius degrees
  3. Equipment for taking vital signs
  4. Competency profiles

     NOTE: Competency profiles for this book are available from the Curriculum and Instructional Materials Center, Oklahoma State Department of Vocational and Technical Education, 1500 West Seventh Avenue, Stillwater, OK 74074-4364.

- **Provide group instruction as required.**

  1. Review instructional outline for this unit. Modify suggestions to suit class needs, and plan activities for each class period.

  2. Prepare classroom.

     - Put up posters and charts on vital signs.

     - Have equipment available for use in taking vital signs.

  3. Introduce unit.

     - Discuss the introduction on the objective sheet.

     - Point out the "vital" role in health that vital signs play as indicators or "signs" that something may not be right with the body.

  4. Discuss unit and specific objectives. Relate the objectives to your introduction.

  5. Discuss information sheet.

     a. Discuss Objective 1 on temperature readings.

        - Show different types of mercury thermometers and explain the use of each.

        - Compare mercury thermometers, electronic thermometers, disposable thermometers, and forehead strips. Point out any advantages or disadvantages of each.

        - Discuss terms associated with temperature.

        - Discuss the difference between centigrade (Celsius) and Fahrenheit temperature scales. Show the mathematical way to convert from one scale to another:

        - To convert Fahrenheit readings to centigrade, subtract 32 from the reading and multiply by 5/9; thus, C° = 5/9 (F° = 32).

- To convert centigrade readings to Fahrenheit, multiply the centigrade reading by 9/5 and add 32; thus, F° = (C° x 9/5) + 32.

- Compare a centigrade and Fahrenheit thermometer. Point out the importance of documenting which type of thermometer was used.

- Discuss normal ranges of body temperature and what to do if a resident's temperature is out of the normal range.

- Discuss factors that influence body temperature.

- Demonstrate how to clean a thermometer. Have students practice and perform Procedure Sheet 1.

- Show how to read a mercury thermometer and let students practice finding the mercury column and reading it.

- Have students complete Activity Sheet 1 as practice reading Fahrenheit and centigrade thermometers.

- Demonstrate how to shake down a mercury thermometer. Have students practice and perform Procedure Sheet 2.

- Discuss contraindications for taking oral, axillary, or rectal temperatures.

- Demonstrate taking temperatures. Have students practice and perform Procedure Sheets 3-5.

b. Discuss Objective 2 on pulse and respirations.

- Discuss terms associated with pulse and respirations.

- Point out the need to count respirations when the resident is not aware of it.

- Discuss normal ranges of pulse and respirations. Point out what to do if the resident's pulse or respiration rate is out of the normal range.
- Discuss factors that influence pulse rate and respirations.
- Have students check their own pulses at rest and compare them with their pulses after exercise.
- Demonstrate taking a radial pulse. Have students practice and perform Procedure Sheet 6.

c. Discuss Objective 3 on blood pressure.

- Discuss terms associated with blood pressure.
- Display different types of sphygmomanometers. Point out advantages and disadvantages of aneroid and mercury types.
- Have students complete Activity Sheet 2 as practice for reading both aneroid and mercury gauges.
- Demonstrate how to use both aneroid and mercury sphygmomanometers.
- Have students complete Activity Sheet 2 for practice reading aneroid and mercury gauges.
- Discuss normal ranges of blood pressure. Point out what to do if the resident's blood pressure is out of the normal range.
- Discuss factors that influence blood pressure.
- Discuss common errors in measuring blood pressure; point out how to avoid those errors.
- Demonstrate Procedure Sheet 7, and have students practice taking each other's blood pressure.

d. Discuss Objective 4 on recording information about vital signs.

    - Review the need for correct documentation.
    - Review documenting procedures covered in earlier units.
    - Have students complete Assignment Sheet 2, "Record Vital Signs Information."

6. Give written test.
7. Evaluate student performance of procedures.
8. Reteach and retest as required.
9. Complete appropriate section of competency profiles.

- **Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.**

UNIT REFERENCES

American Heart Association Heartbook. New York: E.P. Dutton, 1980.

"Correcting Common Errors in Blood Pressure Measurement." *American Journal of Nursing*, Vol. 65, No. 10, October, 1965.

"Heart Sounds." *NursingLife*, July/August, 1986.

Schneidman, Rose and Susan Lambert. *Being a Nursing Assistant*, 4th ed. Chicago: The Brady Company, 1986.

Sloan, Jamee Reid. *Practical Nursing I.* Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1981.

Whitson, Betty Jo and Judith M. McFarlane. *The Pediatric Nursing skills Manual.* New York: John Wiley & Sons, Inc., 1980.

Wolff, LuVerne and Marlene H. Weitzel. *Fundamentals of Nursing*, 7th ed. Philadelphia: J.B. Lippincott, 1983.

SUPPLEMENT

Pretest

PART I

Match the following terms associated with vital signs to their correct definitions. Write the correct letters in the blanks.

___ 1. Normal axillary temperature
___ 2. Artery used for measuring pulse
___ 3. Pulse beats heard when listening to blood pressure
___ 4. Normal blood pressure for an infant
___ 5. Normal rectal temperature
___ 6. Top number in blood pressure reading
___ 7. Normal oral temperature
___ 8. Artery in arm that is used in blood pressure measurement
___ 9. Bottom number in blood pressure measurement
___10. Normal blood pressure in healthy children
___11. Pulse rate over 100 beats/minute

a. Systolic
b. Diastolic
c. 98.6° F
d. 99.6° F
e. 97.6° F
f. Brachial
g. Radial
h. Tachycardia
i. Korotkoff sounds
j. 120/80
k. 90/60

PART II

Answer the following questions about vital signs. If the question lists multiple choices, write the letter of the correct answer in the blank. If the question does not give choices, write the correct answers in the blanks given.

___ 1. Always hold a thermometer by the ____ end, never by the _____ end

a. Bulb.....Stem   b. Stem.....Bulb

___ 2. When cleaning a mercury thermometer, always _____ .

a. Wipe down thermometer from stem to bulb using cotton balls and antiseptic
b. Wipe down thermometer from bulb to stem using cotton balls and antiseptic
c. Drop thermometer into antiseptic and immediately shake thermometer to dry
d. Soak for 5 minutes in warm soapy water

___ 3. Name four factors that influence body temperature.

a. ____

b. ____

c. ____

d. ____

___ 4. When taking oral temperature, wait _____ minutes after resident has ingested hot or cold food or liquid.

a. 3 to 5
b. 5 to 10
c. 10 to 15
d. 15 to 20

___ 5. When taking a rectal temperature, leave thermometer in place _____ minutes.

a. 3 minutes
b. 5 minutes
c. 8 minutes
d. 15 minutes

___ 6. A mercury thermometer should be shaken down ____

a. Before using thermometer
b. After using thermometer
c. Only after cleaning thermometer
d. Both A and B

7. Mercury thermometers should be shaken down until the level of mercury is ____ .

   a. 90° F
   b. 92° F
   c. 95° F
   d. 98° F

____ 8. Select the statement that is *NOT* a guideline for cleaning thermometers.

   a. Handle carefully to avoid breakage
   b. Always use warm tap water
   c. Clean rectal thermometers
   d. Wipe thermometers clean and dry with cotton balls

____ 9. Name three contraindications for taking an oral temperature.

   a. ____

   b. ____

   c. ____

____10. When taking an axillary temperature, remember the following guidelines except ____ .

   a. When recording temperature, write *ax* next to reading
   b. Leave thermometer in place for 10 minutes
   c. If axilla is damp, rub it vigorously with tissue or cloth to dry
   d. Place resident's arm across chest or abdomen to hold thermometer in place

____11. Do not take a rectal temperature for a resident who ____ .

   a. Has diarrhea
   b. Has a rectal disorder or injury
   c. Has heart disease
   d. All of the above

___12. Name three types of mercury (glass) thermometers:

a. ______________________________

b. ______________________________

c. ______________________________

___13. Pulse is felt over the ____ artery on the thumb side of the wrist.

a. Pedal
b. Brachial
c. Axillary
d. Radial

___14. Name five factors that influence pulse rate and respirations.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

___15. Do not take blood pressure in the affected arm of the resident who_____ .

a. Has had a stroke and whose arm is weakened
b. Has an intravenous line in that arm
c. Has had a mastectomy on that side
d. All of the above are contraindications

___16. The term used to describe the amount of pressure exerted on the artery wall as the heart contracts and forces blood through the body via the arteries is called ____ .

a. Diastolic pressure
b. Pulse
c. Systolic pressure
d. Blood pressure

___17. The two types of pressure gauges available in sphygmomanometers are _____ .

a. Mercury and vertical
b. Mercury and aneroid
c. Aneroid and dial
d. Sphygmomanometer and dial

___18. When using a mercury sphygmomanometer, it is important to observe the level of the meniscus ____ .

a. From below looking up
b. From above looking down
c. Slightly to one side
d. Directly and at eye level

___19. Blood pressure is measured in the arm over the ____ artery.

a. Brachial
b. Radial
c. Pedal
d. Axillary

___20. The upper limits of normal blood pressure for and individual 75 years or older are ____ .

a. 90/60
b. 120/80
c. 140/90
d. 180/100

___21. Normal blood pressure for healthy adults 20 to 40 years old is ____ .

a. 90/60
b. 120/80
c. 140/90
d. 150/100

___22. A steady rise in blood pressure is expected in healthy individuals from birth to advancing age.

a. True
b. False

___23. The width of the blood pressure cuff should be ____ the diameter of the arm.

a. Twice as wide as
b. 50% wider than
c. 20% wider than
d. Just as wide as

___24. The arm used for blood pressure reading must be held ____.

a. At the level of the heart
b. Above the level of the heart
c. Below the level of the heart
d. Above the head

___25. List five general guidelines that you **must** follow in documenting a resident's vital signs.

a. ____

b. ____

c. ____

d. ____

e. ____

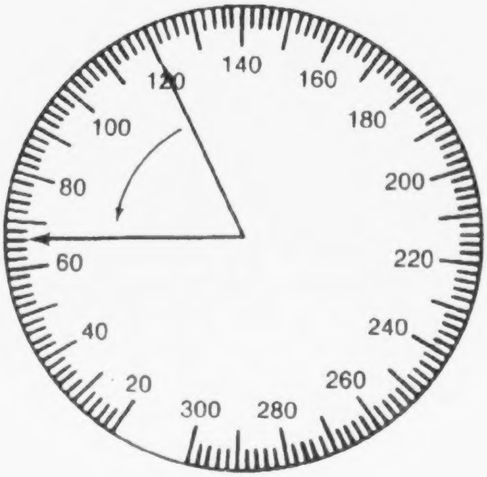
___26. Mr. Resident is a seventy-two-year-old man who has a history of heart disease. You have taken his vital signs and record the following readings:

Blood pressure	92/60
Pulse rate	75
Respirations	16
Temperature	97.6° F "oral"

Which finding represents an ABNORMAL finding?

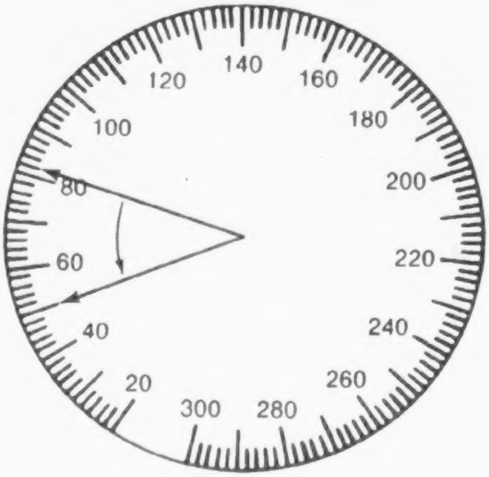
a. Blood pressure
b. Pulse
c. Respirations
d. Temperature

___27. "Read" the following blood pressure gauges. Record your findings in the blanks provided.



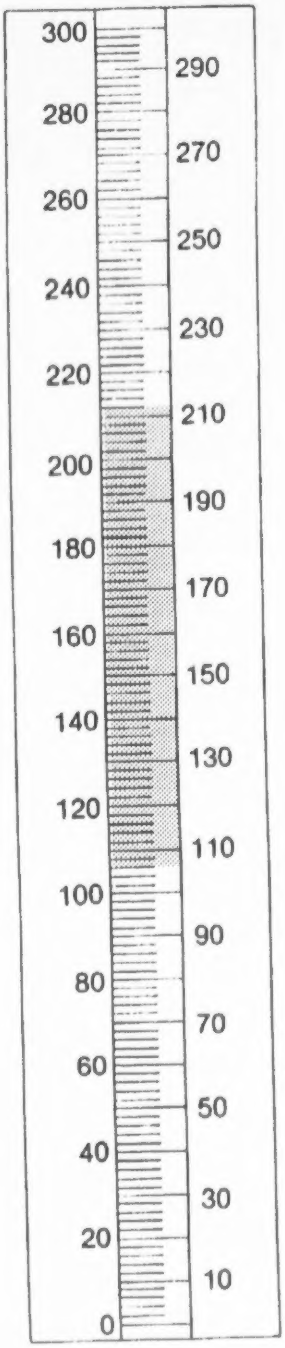
140
120
160
100
180
80
200
60
220
40
240
20
260
300
280

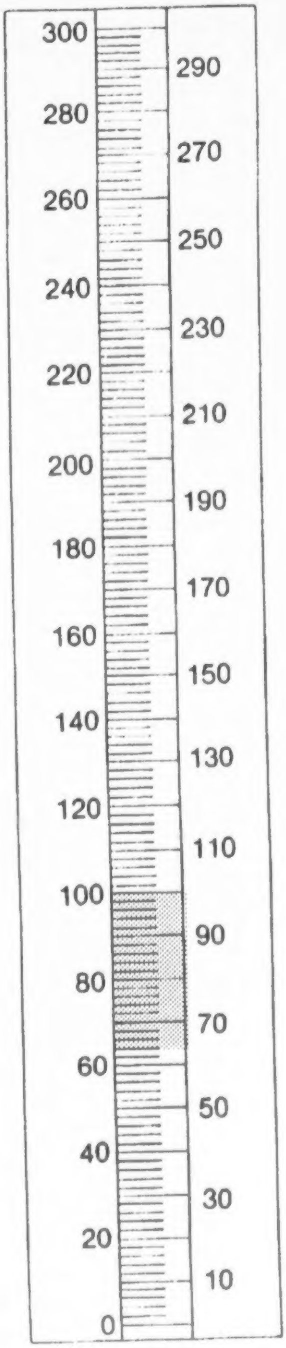
a. BP= __________



140
120
160
100
180
80
200
60
220
40
240
20
260
300
280

b. BP= __________





c. BP= ____________

d. BP= ____________

__28. Document the information provided on the chart form below.

At 9:00 a.m. on September 20, 1988, you were taking care of Mr. Stone (82 yrs). Vital signs taken then revealed these findings: BP 200/106, Pulse 80, Resp 20, Temp 101.6° F Rectal. At noon the same day, vital signs were repeated, with the following results. BP 210/112, Pulse 90, Resp 26, Temp 102.8° F taken rectally.

RESIDENT'S LOG

Date:_______ Resident's Name:______________________

VITAL SIGNS

Time:	0900	1200
Systolic	______	______
Diastolic	______	______
Pulse	______	______
Respirations	______	______
Temperature	______	______
Caregiver	______	______

Questions 29-30 pertain to the information given in Question 28.

__29. At noon, the vital sign reading that indicated a NORMAL finding was_____ .

a. Blood pressure
b. Pulse
c. Respiration
d. Temperature

___30. Of the findings at 9:00 a.m., which would most cause the caregiver to report the situation to supervisor?

a. Blood pressure
b. Pulse
c. Respiration
d. Temperature

PART III

Your instructor will set up situations for you to perform the following procedures:

1. Read a thermometer accurately.

2. Clean a thermometer.

3. Take an oral temperature.

4. Take an axillary temperature.

5. Take a rectal temperature.

6. Take pulse and respirations.

7. Take blood pressure.

SUPPLEMENT 2

Answers to Pretest

PART I

1. e
2. g
3. i
4. k
5. d
6. a
7. c
8. f
9. b
10. j
11. h

PART II

1. b
2. a
3. Answers should include any four of the following

    a. Illness
    b. Environment
    c. Hot/cold foods
    d. Time of day.
    e. Pregnancy
    f. Exercise
    h. Age
    i. Emotions
    j. Chewing gum
    g. Smoking
    k. Mouth breathing

4. c
5. c
6. d
7. c
8. b
9. Answers should include any three of the following

    a. Resident who is not responsible for own actions, such as an unconscious or delirious resident
    b. Resident who cannot hold mouth closed
    c. Resident who has tubes in nose/mouth
    d. Resident who has sores on mouth
    e. Resident who has history of seizures

10. c

11. d

12. a. Oral
    b. Rectal
    c. Security (stubby)

13. d

14. Answers should include any five of the following

    a. Age
    b. Medication
    c. Smoking
    d. Exercise
    e. Obesity
    f. Emotion
    g. Illness
    h. Stimulants
    i. Pregnancy

15. d

16. c

17. b

18. d

19. a

20. d

21. c

22. a

23. c

24. a

25. Answers should include any five of the following

    a. Mark resident's name clearly on form
    b. Write clearly
    c. Document date and time vital signs were taken
    d. Identify method of measurement
    e. Identify units of liquid measure
    f. Use ink
    g. Sign your name clearly
    h. Use numbers and decimal points accurately
    i. Never erase

26. a

27. a. 120/66
    b. 82/50
    c. 210/106
    d. 102/64

28. RESIDENT'S LOG

Date: 9-20-88 Resident's Name: Stone, Mr.

VITAL SIGNS

Time:	0900	1200
Systolic	200	210
Diastolic	106	112
Pulse	80	90
Respirations	20	26
Temperature	101.6° F	102.8° F

Medication Administration Technician *signature*

29. b

30. a

PART III Performance skills evaluated to the satisfaction of the instructor

OBJECTIVE 1

Obtain temperature reading

INTRODUCTION

The body creates heat as it produces energy from the foods we eat. The measurement of heat in the body is called *temperature*.

Body temperature is the balance between heat produced and heat lost. As the body uses food for energy, it produces heat. Heat is lost through the skin, breathing, urine, or feces. Body temperature is generally stable, but it is normally lower in the morning and higher in the afternoon or evening.

Common sites for taking a temperature include mouth, rectum, and axilla or underarm.

Temperature is measured in units called *degrees* on a Fahrenheit or centigrade scale. Check with your agency to determine which scale is preferred.

There are several types of thermometers and several methods of taking temperature. You will need to learn appropriate care for each type of thermometer and how to read them accurately.

Terms associated with temperature

Antiseptic — Chemical used to help remove germs from an object.

EXAMPLE: Rubbing alcohol is an antiseptic that is commonly used to clean a thermometer.

Axillary — Pertaining to the armpit; an axillary temperature is taken by placing the thermometer snugly in the armpit

Centigrade (Celsius) — Temperature scale that sets zero at the freezing point and 100 degrees at the boiling point

Fahrenheit — Temperature scale that sets zero at the temperature of equal weights of snow and salt mixed together; the freezing point is 32 degrees, and the boiling point is 212 degrees

Oral — Pertaining to the mouth; an oral temperature is taken by placing the thermometer in the mouth under the tongue

Rectal — Pertaining to the rectum; a rectal temperature is taken by inserting the thermometer gently into the anus, which is the opening to the rectum

Temperature — How much heat is in the body

Thermometer — Instrument used to measure temperature; most common type of thermometer is a glass or mercury thermometer

Factors that influence body temperature

Age — The heat-regulating mechanism is not fully developed in infants and young children, and is less efficient in elderly persons

Chewing gum — Chewing gum before taking an oral temperature can affect the reading

Emotions — Active secreting glands increase heat production during excitement, anxiety, nervousness, and other strong emotions

Exercise and digestive processes — Body temperature rises as activity increases

External environment — Amount of body fat, fluid, and electrolyte balance affect body temperature

Hot or cold foods or any liquids — Eating or drinking hot or cold substances within 10 to 15 minutes before taking an oral temperature will cause an inaccurate reading

Illness — Infection and disease processes may increase or decrease body temperature

Internal environment — Amount of body fat, fluid, and electrolyte balance affect body temperature

Mouth breathing — A person who breathes through the mouth will have a dry, cool mouth that will not register an accurate oral temperature reading

Pregnancy — Pregnancy and the menstrual cycle affect body temperature

Smoking — Smoking before taking an oral temperature will affect the reading

Time of day — Body temperature is usually at its highest in the mid-afternoon and at its lowest during sleep

Do not take an oral temperature for a resident who...

Contraindications for oral method

- Is not responsible for own actions, such as an unconscious or delirious resident, or a child less than 4 or 5 years old
- Cannot hold mouth closed, such as a resident who breathes through his mouth, is paralyzed on one side of body, or has had surgery or injury to mouth or nose
- Has open sores of the mouth or lips
- Has a tube in the mouth or nose
- Has had a history of having seizures

Contraindications for rectal method

Do not take a rectal temperature for a resident who...

- Has diarrhea
- Has heart disease
- Has a rectal disorder or injury
- Has had a rectal surgery

Normal ranges of body temperature

	°Fahrenheit	°Centigrade
Oral	98.6° (97.6° to 99.0°)	37.0° (36.4° to 37.2°)
Rectal	99.6° (98.6° to 100.0°)	37.5° (37.0° to 37.8°)
Axillary	97.6° (96.6° to 98.0°)	36.5° (35.9° to 36.7°)

IMPORTANT

Report any deviations from normal temperatures to your supervisor.

REPORT TEMPERATURES OVER 104.O° FAHRENHEIT IMMEDIATELY TO YOUR SUPERVISOR OR RESIDENT'S PHYSICIAN, TO RECEIVE INSTRUCTION TO LOWER BODY TEMPERATURE.

Types of thermometers

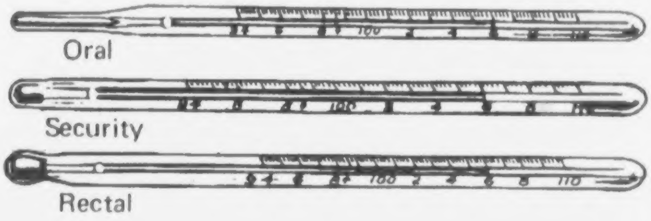
There are several methods of measuring temperature. We will discuss the use of mercury, electronic, and disposable thermometers.

Mercury thermometers

Some thermometers are made of glass and contain a narrow tube of a liquid metal called mercury. Mercury will expand and travel up the tube as the temperature goes up. There are calibrated numbers on the outside of the glass to mark the temperature.

There are three types of mercury thermometers. They are oral, rectal, and security thermometers. Oral thermometers are used to take the temperature by mouth and also can be used to measure the axillary temperature. Rectal thermometers are used to measure temperature in a resident's rectum. Security thermometers are used for taking rectal temperatures on an infant. Rectal thermometers can be recognized by the red tip opposite the bulb. Oral thermometers often have a blue or green tip.

Note the different shapes of the bulbs in the three types of thermometers in the following illustration.



Guidelines for using mercury thermometers

- NEVER USE AN ORAL THERMOMETER TO TAKE A RECTAL TEMPERATURE!
- NEVER USE A RECTAL THERMOMETER TO TAKE AN ORAL TEMPERATURE!
- Use either a clean oral or rectal thermometer to take an axillary temperature.
- Your facility or agency may encourage you to use plastic covers over the thermometer; plastic covers that are already lubricated are available for taking a rectal temperature.
- Always hold the thermometer by the stem, not the bulb end that holds the mercury; otherwise, your own body heat could affect the temperature reading, and your hands could contaminate the clean bulb.

Reading a mercury thermometer

1. Hold thermometer in horizontal position at eye level.

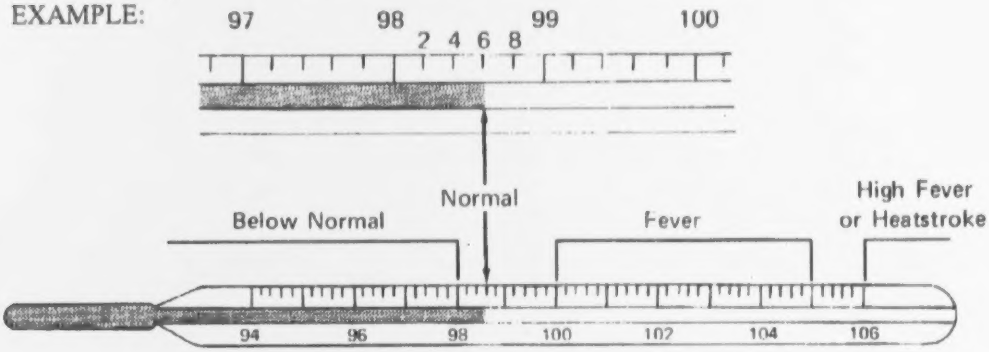
   NOTE: A light coming over your shoulder may help you read the thermometer more clearly.

2. Roll the thermometer slowly back and forth between your thumb and forefinger until you can see the mercury column clearly.

3. Note the calibrations on the side of the thermometer. Each long line stands for one degree. Each short line between the long lines stands for two tenths (0.2) of a degree.

4. Look at the end of the mercury and note the line where the mercury ends. If it ends on a short line, note the number of the previous long line. The reading will be the degree of the line plus 2, 4, 6 and 8 tenths of a degree.

EXAMPLE:

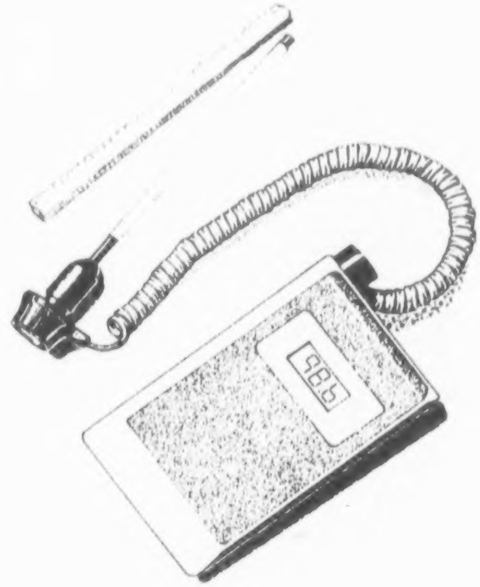


The illustration represents 98.6° Fahrenheit. Note the mercury ends past the long line, which represents 98.6° F, and stops at the third short line, which represents 0.6°.

Electronic Thermometers

Electronic thermometers are portable, battery-powered units that can be recharged between uses. Both Fahrenheit and Celsius versions are available. The electronic unit comes with separate oral and rectal probes, which are often different colors—blue for oral, red for rectal.

Electronic thermometers cost more than mercury thermometers; but they measure temperatures faster, are easier to read, and are not as easily broken. They are less likely to spread germs because the probes have disposable covers that are used only once.

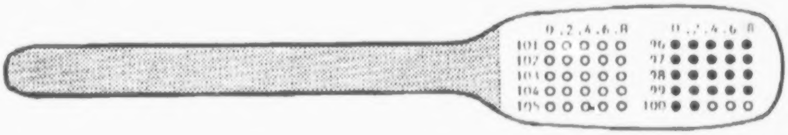


Disposable Thermometers

Disposable oral or axillary thermometers are made of paper and are used only once. They can measure body temperature from 96.0° to 104.8° Fahrenheit. Disposable Celsius thermometers are also available.

Chemical dots on the paper change color to indicate the body temperature after one minute under the tongue or after three minutes in the axilla. The color of the dots stabilizes about six seconds after removal of the thermometer, making a permanent record of the temperature.

The illustration below indicates a temperature of 100.2° Fahrenheit.



0 .2 .4 .6 .8
101
102
103
104
105
0 .2 .4 .6 .8
96
97
98
99
100

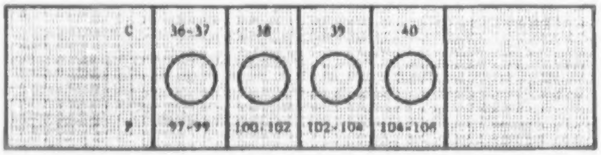
Forehead Strips

Forehead strips are reusable thermometers. A chemical patch changes color to indicate body temperature. To use, apply strip to clean, dry forehead; hold it in place for one minute. Read color chart to determine temperature.

- Use forehead strips indoors within comfortable temperatures away from drafts and strong light.

- Store away from direct sunlight or other source of ultraviolet light.

- Store forehead strips in moderate temperature



C
36-37
38
39
40
F
97-99
100-102
102-104
104-106

184

OBJECTIVE 2 — Take pulse and respirations

INTRODUCTION

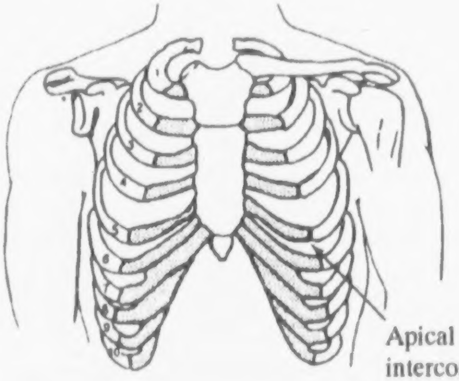
The pulse is a measure of heart beats per minute.

Pulse can be measured directly over the heart by listening to the heart with an instrument called a *stethoscope*, or it can be measured by feeling specific arteries in the body. Pulse is felt as a wave of blood pushes through an artery, causing the artery to expand and contract.

The radial artery in the wrist is often used to measure pulse because it lies close to the skin and the pulsation of the artery is easily felt. Apical pulse is the preferred site for counting an infant's pulse because feeling a pulse in an infant's wrist or arm is difficult.

Terms associated with pulse and respirations

Apical — Pertaining to the heart or the apex of the heart; the apical region is located at the fifth intercostal space just under the left nipple on the chest



Apical region (at fifth intercostal space)

Artery — Arteries are blood vessels that take blood from the heart to the rest of the body; the radial artery is often used to feel pulse to determine heart rate

Bradycardia — Heart rate that drops below 60 beats per minute

NOTE: Report bradycardia to supervisor or caregiver.

Intercostal space — Area between the ribs of the chest; heart sounds are best heard at the fifth intercostal space at the left nipple line

NOTE: To find the intercostal spaces, feel for the ribs and count form the top down until you feel the fifth rib. The space directly below this rib is the fifth intercostal space.

Pulse — Measurement of heart rate; pulse is felt as a wave of blood pushed through an artery causing the artery to expand and contract (pulsate)

Radial — Pertaining to the wrist

Respiration — Act of breathing in and out; respiratory rate is measured in breaths per minute; respirations are comprised of two parts: *inspiration* (breathing in), and *expiration* (breathing out)

Stethoscope — Instrument used to listen to internal body sounds; a stethoscope is used to listen to heart sounds when determining apical heart rate

Tachycardia — Pulse rate over 100 beats per minute, resulting from excitement, stress, stimulants, or illness such as shock or infection

Normal range for pulse and respirations

Average pulse rate per minute for well persons at various ages (*Fundamentals of Nursing*, J.B. Lippincott).

Age	Pulse Rate
Birth	120
1 yr	110
5 yrs	95
10 yrs	85
Adolescent	80
Adult	75

Normal respiratory rate for adults is 14 to 20 respirations a minute. Consistent respiratory rate which exceeds 40 per minute should be reported to supervisor.

Factors that influence pulse rate and respirations

Age — Pulse and respiratory rates are generally higher in infants and small children

Emotions — Excitement, fear, or stress will alter heart and respiration rates

Exercise — Physical exertion will usually increase heart rate and respiration

Illness — Fever and infection often will increase heart rate. Other illnesses and diseases can cause changes in pulse and respirations

Medications — Many medications will alter pulse and respiratory rate

Obesity — Excessive weight puts added stress on the heart and lungs, causing increased rate in pulse and respiration

Pregnancy — Pregnancy causes an increase in blood and fluid volume, and increases heart rate to meet the extra demands on the heart

Smoking — Nicotine found in tobacco will affect heart rate and respirations

Stimulants — Consuming substances containing caffeine will cause an increase in pulse

OBJECTIVE 3

Take blood pressure

INTRODUCTION

Blood pressure is a measure of the tension of the blood within the arteries. As a medication administration technician, you will need to know how to measure blood pressure accurately. Blood pressure is a valuable assessment tool in determining a resident's overall status.

Contraindications

Do not take blood pressure in the affected arm of the resident who...

- Has had a stroke and whose arm is weakened
- Has had a mastectomy (removal of the breast) on that side
- Has an intravenous (IV) line in that arm
- Has had surgery on that arm or shoulder

In the above cases, simply use the arm opposite the affected arm for blood pressure measurement.

Terms associated with blood pressure measurement

Aneroid — Type of pressure gauge without mercury used in some sphygmomanometers; consists of a round, calibrated dial with a pointer needle that indicates pressure.

Blood pressure — Amount of force on the artery wall as a wave of blood flows through artery; consists of two parts: systolic and diastolic pressures. Pressure is measured in units called *millimeters of mercury* and is written as *mmHg*.

Brachial artery — Artery that runs along the inner aspect of the arm; can be felt as a pulse on inside of elbow.

Diastolic — Amount of pressure exerted on the artery wall as the heart relaxes between contractions; recorded as the bottom number of the blood pressure reading.

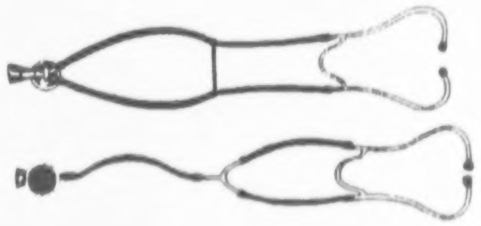
Korotkoff sounds — Sounds heard over an artery when the blood pressure is being measured; also called *pulse sounds*.

Meniscus — Curved portion at the top of the mercury column in a mercury pressure gauge. The pressure reading is made at the level of the meniscus.

Mercury — Type of pressure gauge used in some sphygmomanometers; consists of a vertical column meter in which mercury level indicates pressure measurement.

Sphygmomanometer — Instrument for measuring the blood pressure. It is composed of a blood pressure cuff with inflatable bladder, and a pressure gauge. The pressure gauge can be of the aneroid or mercury type.

Stethoscope — Instrument used to hear sounds within the body; used in blood pressure measurement to listen to Korotkoff sounds over the brachial artery. There are two sides of a chest piece with which to listen: the bell and the diaphragm.



Systolic — Amount of pressure exerted on the artery wall as the heart contracts and forces blood through the body via the arterial system; recorded as the top number of the blood pressure reading.

Factors that influence blood pressure

Age — A steady rise in blood pressure is expected in healthy individuals

Body temperature — When the body temperature is elevated or the individual is in a very warm environment, blood pressure tends to decrease

Emotions — Anger, fear, and excitement can cause blood pressure to rise

Exercise — Blood pressure will usually rise with exercise or other strenuous activity

Food — Blood pressure will increase after ingestion of food

Medications — Many medications, especially those for the heart or blood pressure, will affect the blood pressure of the individual

Position — Blood pressure is generally lower when an individual is lying down than when he or she is sitting or standing

Sex — Females usually have a lower blood pressure than males at the same age

Normal ranges of blood pressure

Blood pressure of healthy individuals can be within a wide range and still be considered normal. Since individual differences are present, it is important to know what is a normal range of blood pressure for your resident. The following table shows the upper limits of normal blood pressure as determined by the American Heart Association.

Age	Blood Pressure
Infants	90/60
3 to 6 years	110/70
7 to 10 years	120/80
11 to 15 years	130/80
15 to 20 years	130/85
20 to 40 years	140/90
40 to 60 years	160/95
60 to 75 years	170/95
75 years and older	180/100

WARNING

IF BLOOD PRESSURE OF YOUR RESIDENT IS LESS THAN 90/60 OR GREATER THAN ABOVE GUIDELINES FOR MAXIMUM NORMAL BLOOD PRESSURE, NOTIFY YOUR SUPERVISOR OR RESIDENT'S PHYSICIAN FOR INSTRUCTIONS REGARDING ACTION TO BE TAKEN.

Common errors in blood pressure measurement

Selection of wrong blood pressure cuff

The width of the blood pressure cuff is an important factor in obtaining accurate blood pressure readings. The cuff should be 20 percent wider than the diameter of the arm. There are basically three sizes of cuffs available:

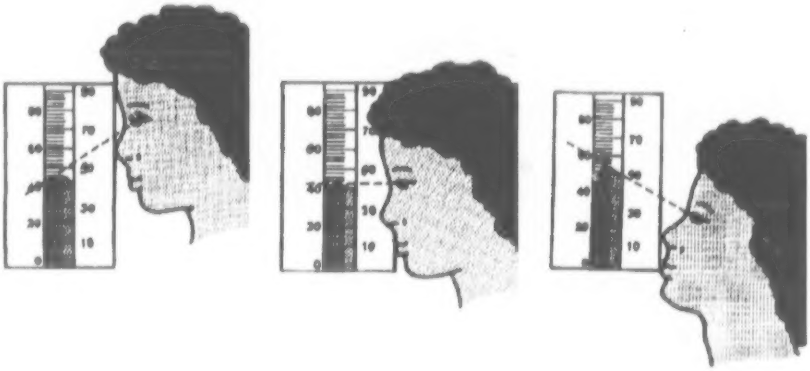
Small — used for children and very thin adults

Medium — appropriate for most average adults

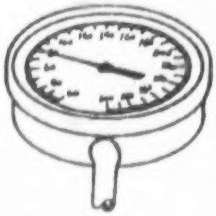
Large — often called a *thigh cuff*; this cuff is used for obese adults

Reading pressure gauge inaccurately

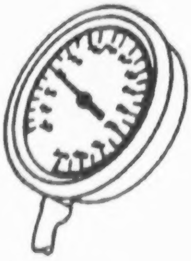
For accurate blood pressure readings, observe the sphygmomanometer directly and at eye level. When reading a mercury manometer, observe the meniscus at eye level to determine blood pressure. The pressure reading can be inaccurate if observed at an angle.



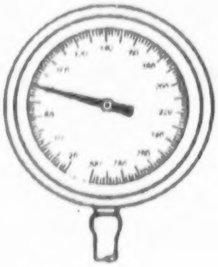
When using an aneroid manometer for blood pressure measurement, read the dial gauge straight on for optimal accuracy. Notice in the illustration below how tilting the dial can obscure your ability to read the dial accurately. Dial C is positioned for direct viewing, and the scale can be read easily.



A. Wrong



B. Wrong



C. Correct

Positioning the arm incorrectly for blood pressure reading

Hold the limb used for blood pressure reading at the level of the heart. Inaccurate readings can result if the arm is held too high or is allowed to drop too low.

OBJECTIVE 4 **Record vital signs information**

INTRODUCTION

Recording vital signs information clearly and accurately is very important.

Your agency may have a special form to use for recording vital signs. Ask your particular agency about the policy.

When taking vital signs, immediately write findings on paper, then transfer the information to permanent record after you have completed your task and you have made the resident comfortable.

Guidelines

The resident's record or care plan is a legal document; therefore, several guidelines must be followed:

- Make sure the resident's name is clearly marked on the form.
- Write clearly so that entry can be easily read.
- Use clearly written numbers and decimal points accurately.
- Document date and time vital signs were taken.
- Identify method of measuring temperature (oral, rectal, or axillary), and scale of temperature (°C or °F).
- Identify units of liquid measure (ounces or cc).
- Always use ink on the resident's record.
- Never erase or cover any previously recorded writing.
- If required by your agency, sign your name clearly on the designated space on the document.

ASSIGNMENT SHEET 1	MEDICATION ADMINISTRATION TECHNICIAN OBTAIN VITAL SIGNS

OBJECTIVE 4 **Record vital signs information**

Name________________________________ **Score**____________

INSTRUCTIONS Complete the chart forms below using the information found in the narrative.

Vital signs were taken on Mr. Kent at 8:00 a.m. Temperature was 98.8° F taken orally. Pulse was 68 beats/minute, and blood pressure was 134 over 82. At 8:00 p.m. his temperature was the same, but his pulse was 88 and his blood pressure was 160 over 80. Respirations were 20 breaths per minute each time.

Vital Signs

Kent, Clark
Dr. Xpert

DATE:

TIME:

Temperature

Pulse

Respirations

Blood Pressure

194

OBJECTIVE 4

Record vital signs information

Vital Signs		Kent, Clark Dr. Xpert
DATE: August 20, 1988		
TIME:	8:00 a.m.	8:00 p.m.
Temperature	98.8° F	98.8° F
Pulse	68/min	88/min
Respirations	20/min	20/min
Blood Pressure	134/82	160/80

PROCEDURE 1

Clean a Mercury Thermometer

INTRODUCTION

In a care facility there may be a special method that they wish you to follow for cleaning a thermometer. Some choose to wash the thermometer, then disinfect it, then store it in an antiseptic solution. If they do not have a special method, you may use just soap and *cool* water.

Even if only one person is to use the thermometer and it is kept in the resident's room, you still must clean it after each use and before storage.

GUIDELINES

Safety factors are important when you clean mercury thermometers:

- ALWAYS USE COOL TAP WATER WHEN CLEANING THERMOMETER
- Handle carefully to avoid breakage
- Clean rectal thermometers separately form oral thermometers

EQUIPMENT AND MATERIALS

- Thermometer and case
- Soap
- Cool tap water
- Cotton balls
- Two small basins
- Antiseptic solution

PROCEDURE

1. Wash hands
2. Gather necessary equipment and take to sink or work place
3. Fill one basin with cool water and soap
4. Fill other basin with antiseptic solution
5. Wash thermometer

   a. Place thermometer in soapy water
   b. Using cotton balls, wipe from stem down to tip of thermometer
   c. Rinse thermometer in *cool* water
   d. If you are not going to disinfect the thermometer, dry it now with clean cotton balls

6. Disinfect thermometer
   a. Place thermometer in antiseptic solution
   b. Remove thermometer from solution
   c. Rinse with *cool* water
   d. Dry with clean cotton balls
7. Store thermometer in its case or in container with antiseptic solution
8. Discard cotton balls and replace equipment
9. Wash hands

PROCEDURE 2 Shake Down a Mercury Thermometer

INTRODUCTION

The mercury in the thermometer stays at its previous reading until someone shakes the thermometer. Getting an accurate temperature reading requires having the mercury level lower than the resident's body temperature at the beginning of the procedure. Anytime you need to use a mercury thermometer, check that the mercury level is 95.0° Fahrenheit or less before taking the temperature.

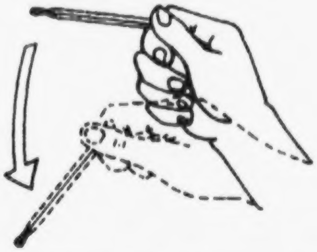
- Shake down thermometer before and after use
- Never touch the bulb end of a thermometer
- Avoid striking the thermometer against anything while shaking it

EQUIPMENT

- Mercury thermometer

PROCEDURE

1. Wash hands
2. Hold stem end of thermometer firmly between thumb and forefinger
3. Check condition of thermometer to make sure it is not cracked or chipped
4. Check area around you to make sure you do not accidentally hit anything while shaking thermometer
5. Shake thermometer by snapping wrist downward as if shaking water from your fingers



6. Repeat shaking thermometer until mercury level is below 95.0° F

PROCEDURE 3 Take an Oral Temperature

INTRODUCTION

Taking an oral temperature is perhaps the most common way to determine body temperature. Placed under the tongue where blood vessels are close to the surface, the tip of the thermometer measures internal temperature. The mouth is easy to get to without having to remove any clothing.

GUIDELINES

- Wait 10 to 15 minutes to take the temperature if resident has been eating, drinking, smoking, or chewing gum within the last 15 minutes

- Always hold the thermometer by the stem end, not the bulb end

- Make sure that the mercury thermometer is clean with no chips or cracks and that it can be easily read

- Never use warm or hot water to clean mercury thermometer

- Shake thermometer down to less than 95° F before and after taking temperature

EQUIPMENT AND MATERIALS

For mercury thermometer

- Mercury thermometer with case
- Watch with a second hand
- Clean tissue
- Paper and pen
- Clean, disposable gloves (optional)
- Plastic thermometer covers (optional)

PROCEDURE

1. Wash hands

2. Assemble equipment and take to resident

3. Explain procedure to resident

4. Assist resident to a sitting or lying position
5. Put on disposable gloves (optional)
6. Shake thermometer down until mercury level is less than 95° F
7. Rinse bulb of thermometer under cool water to remove antiseptic solution and to moisten tip

   OR...

   Place plastic cover over thermometer
8. Gently place mercury bulb under resident's tongue; ask resident to keep lips closed without biting thermometer
9. Leave thermometer in place for eight minutes; remain with resident during this time
10. Remove thermometer carefully
11. Wipe thermometer with tissue, wiping from stem to bulb; discard tissue

    OR...

    Remove plastic cover and discard
12. Read thermometer and immediately record temperature on paper
13. Shake mercury down to 95 ° or below
14. Clean thermometer
15. Return thermometer to case
16. Remove and discard gloves
17. Make resident comfortable
18. Return supplies to proper storage
19. Wash hands

20. Record temperature on care plan

21. Report any deviation from usual temperature to supervisor

EQUIPMENT AND MATERIALS

For electronic thermometer

- Electronic thermometer
- Oral probe for thermometer
- Disposable probe cover
- Paper and pen
- Clean, disposable gloves

PROCEDURE

For electronic thermometer

1. Wash hands

2. Assemble equipment

3. Put on disposable gloves

4. Prepare thermometer

    a. Plug oral probe into electric unit

    b. Activate electronic thermometer according to instructions

    c. Put cover on probe tip according to instructions

5. Explain procedure to resident

6. Assist resident to a sitting or lying position

7. Place covered probe under resident's tongue

8. Ask resident to close mouth gently around probe without biting down on probe.

9. Leave probe in place until the electronic signal indicates that thermometer has measured temperature

10. Read temperature on digital display and immediately record temperature on paper

11. Remove probe from resident's mouth

12. Discard probe cover without touching it by pressing eject button on probe

13. Return probe to holder

14. Remove and discard gloves

15. Make resident comfortable

16. Return electronic thermometer to charging unit

17. Wash hands

18. Record temperature on resident's log

19. Report any deviations from usual temperature to supervisor

PROCEDURE 4

Take an Axillary Temperature

INTRODUCTION AND GUIDELINES

Taking an axillary temperature is an alternative to taking an oral or rectal temperature. It is the safest but least reliable method of obtaining body temperature.

- Never take an axillary temperature right after the resident's bath or shower; any dampness in the armpit will affect the temperature reading

- Use an oral or rectal thermometer that has been cleaned

- Write *ax* beside the recorded temperature on the care plan to point out that the temperature is an axillary reading because the temperature registered at the axillary site will usually be one Fahrenheit degree lower than the normal oral temperature and two Fahrenheit degrees lower than the normal rectal temperature

EQUIPMENT AND MATERIALS

For mercury thermometer

- Mercury thermometer
- Watch with a second hand
- Paper and pen
- Clean tissue

PROCEDURE

For mercury thermometer

1. Wash hands

2. Assemble equipment, including clean thermometer, and take to resident

3. Explain procedure to resident

4. Assist resident to a sitting or lying position

5. Remove the resident's arm from sleeve of the gown or clothes

6. If axilla is damp, pat it dry with tissue

   NOTE: Avoid excessive rubbing of the armpit because it will generate heat.

7. Check thermometer for any cracks or chips
8. Shake thermometer down to 95 ° F or less
9. Place thermometer in axilla with mercury tip pointing slightly upward toward the shoulder
10. Place resident's arm across chest or abdomen to hold thermometer in place
11. Leave thermometer in place 10 minutes; stay with the resident
12. Remove thermometer
13. Wipe with tissue from stem end downward
14. Read thermometer and immediately record temperature on paper, writing *ax* to indicate it was an axillary reading
15. Put resident's arm back through sleeve and make resident comfortable
16. Shake thermometer down to at least 95° F
17. Clean thermometer
18. Return equipment to storage area
19. Wash hands
20. Record temperature on care plan, writing *ax* beside the temperature
21. Report any deviations from normal temperature to supervisor

EQUIPMENT AND MATERIALS

For electronic thermometer

- Electronic thermometer
- Disposable probe cover
- Paper and pen
- Clean tissue

PROCEDURE

For electronic thermometer

1. Wash hands
2. Assemble equipment
3. Plug probe into unit
4. Activate electronic thermometer according to instructions
5. Put cover over probe
6. Explain procedure to resident
7. Assist resident to a sitting or lying position
8. Remove resident's arm from sleeve of clothing or gown
9. If axilla is damp, pat dry with tissue
10. Place probe tip in axilla
11. Place resident's arm across chest or abdomen to hold thermometer probe in place
12. Leave probe in place until electronic signal indicates that thermometer has completed the reading
13. Read temperature on digital display and immediately record temperature on paper, writing *ax* to indicate temperature is an axillary reading
14. Press eject button to release probe cover
15. Put resident's arm back through sleeve and make resident comfortable

16. Return electronic thermometer to charging unit

17. Wash hands

18. Record temperature on care plan, writing *ax* beside the temperature

19. Report any deviations from normal temperature to supervisor

PROCEDURE 5

Take a Rectal Temperature

INTRODUCTION AND GUIDELINES

If you are to use the rectal method, be sure to get suggestions about the most comfortable way to position the resident on his or her side if there are special problems such as a weakened side, sores, or tubes and equipment.

If the resident is a child, you will also need to determine if the child is familiar with the rectal method and if there have been any special problems using the method.

Check that the thermometer is a rectal thermometer. A rectal thermometer usually has a rounded bulb to lessen the possibility of injuring the rectum during the process. Rectal thermometers also have a red tip opposite the bulb which further identifies it as a rectal thermometer.

EQUIPMENT AND MATERIALS

For mercury thermometer

- Mercury thermometer marked Rectal
- Watch with a second hand
- Paper and pen
- Clean tissues
- Lubricant
- Clean, disposable gloves

PROCEDURE

For mercury thermometer

1. Wash hands
2. Assemble equipment and take to resident
3. Check that thermometer is a rectal thermometer and that it has no chips or cracks
4. Shake thermometer down to 95° F or less
5. Explain procedure to resident

6. Provide privacy

7. Put on disposable gloves

8. Lubricate bulb of thermometer, using a small amount of lubricant on a tissue

9. Turn back covers or clothing just enough so you can see the rectal area; avoid overexposing the resident

10. Insert thermometer

    1) Raise upper buttock to expose anus

    2) Insert lubricated bulb gently into rectum 1 inch to 1 1/2 for adult

11. Hold thermometer in place for 8 minutes

    WARNING
    Never leave resident while taking a rectal temperature. If the resident moves while the thermometer is not being held, injury to the rectum can result.

12. Remove thermometer

13. Wipe thermometer with tissue from stem to bulb; discard tissue

14. Read thermometer and immediately write temperature down, writing *R* to indicate that it is a rectal temperature

15. Clean rectal area with tissue; discard tissue

    NOTE: If a resident is female, wipe from front to back, away from the vagina.

16. Make resident comfortable

17. Shake mercury down to 95 ° F or less

18. Clean thermometer and replace in holder

19. Remove and discard gloves

20. Wash hands

21. Return equipment and supplies to proper storage

22. Record temperature on the log, writing *R* beside the temperature to indicate it is a rectal reading

23. Report deviation from normal temperature to supervisor

EQUIPMENT AND MATERIALS

For electronic thermometer

- Electronic thermometer
- Rectal probe
- Disposable probe cover
- Lubricant
- Clean tissues
- Paper and pen
- Clean, disposable gloves

PROCEDURE

For electronic thermometer

1. Wash hands

2. Assemble equipment

3. Explain procedure to resident

4. Provide privacy

5. Put on disposable gloves

6. Prepare thermometer

    a. Plug rectal probe into electronic unit

    b. Activate electronic thermometer according to directions

    c. Put cover on probe tip

    d. Lubricate tip of probe cover with small amount of lubricant on tissue

7. Position resident on side and flex upper knee

8. Turn back covers or clothing just enough so you can see the rectal area; avoid overexposing the resident

9. Insert thermometer

   a. Adult

      1) Raise upper buttock to expose anus

      2) Insert lubricated probe gently into rectum 1/2 inch

10. Hold probe in place until the electronic signal indicates that thermometer has measured the temperature

11. Read temperature on digital display

12. Remove probe from the rectum

13. Immediately write down the temperature, marking it *R* to indicate that it is a rectal temperature

14. Press eject button to remove probe cover

15. Return probe to holder

16. Clean anal area with tissue; discard tissue

    NOTE: If resident is female, wipe from front to back, away from the vagina.

17. Make resident comfortable

18. Remove and discard gloves

19. Replace electronic thermometer in charging unit, and return other supplies to proper storage

20. Wash your hands

21. Record temperature on resident's log, writing *R* beside the temperature to indicate it is a rectal reading

22. Report any deviations from usual temperature to supervisor

OBJECTIVE 2

Take pulse and respirations

EQUIPMENT AND MATERIALS

For radial pulse

- Watch with a second hand
- Pen and paper

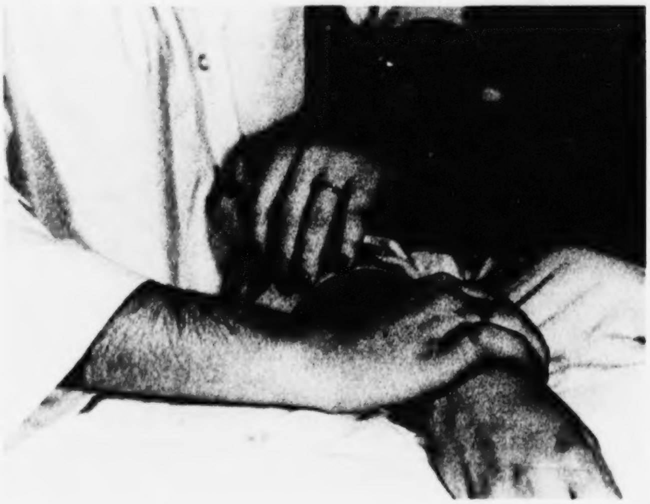
PROCEDURE

For radial pulse

1. Wash hands
2. Assemble equipment
3. Explain procedure to resident
4. Place resident's arms in comfortable position at level of heart

5. Using tips of first two fingers, locate radial pulse on thumb side of resident's wrist

   NOTE: Do not use your thumb to feel for pulse; it has a pulse of its own and may distract from reading an accurate pulse on your resident.



6. Count pulse, exerting slight pressure over radial artery, and using a watch with a second hand for one full minute

7. While still holding resident's wrist, observe respirations for one full minute. Count inspiration and expiration without the resident's being aware of your observation

8. Record pulse and respiratory rate on paper immediately

9. Make resident comfortable

10. Wash hands

11. Record pulse and respirations on log

12. Report any deviations from normal pulse and respirations to supervisor

PROCEDURE SHEET 7

MEDICATION ADMINISTRATION TECHNICIAN
OBTAIN VITAL SIGNS

OBJECTIVE 3

Take blood pressure

EQUIPMENT AND MATERIALS

- Sphygmomanometer (either mercury or aneroid type)
- Stethoscope
- Pen and paper
- Cotton balls with antiseptic or antiseptic gauze wipes

PROCEDURE

1. Wash hands

2. Gather necessary equipment and take to resident

3. Explain procedure to resident

4. Make resident comfortable and position resident in lying or sitting position

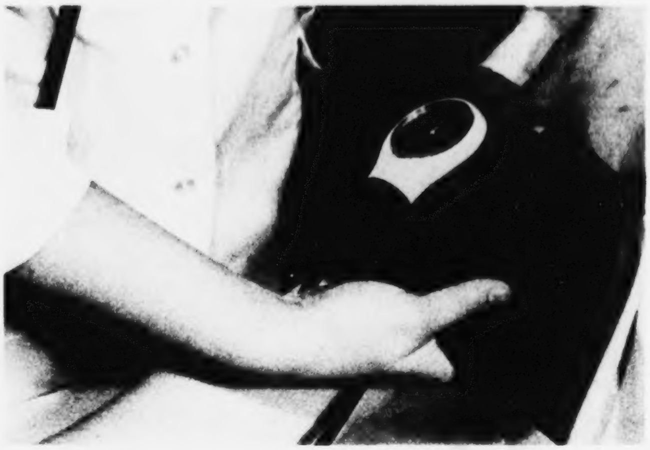
   NOTE: Position resident so arm is resting on the bed or arm chair. Arm should be held at level of heart and the palm of the hand facing upward.

5. Remove constrictive clothing from arm or pull sleeve of clothing up to shoulder

6. Check blood pressure cuff to determine if size of cuff is appropriate for the resident. The cuff should be just a little wide across that the width of the arm above the elbow

7. Apply blood pressure cuff snugly to arm about one inch above the elbow; center the rubber bladder of the cuff over the brachial artery

   NOTE: Most blood pressure cuffs have an arrow marked to help you identify the center of the bladder. Center this arrow along the inside of the elbow.



8. Clean earpiece and diaphragm of stethoscope with antiseptic on cotton balls or with antiseptic gauze wipes

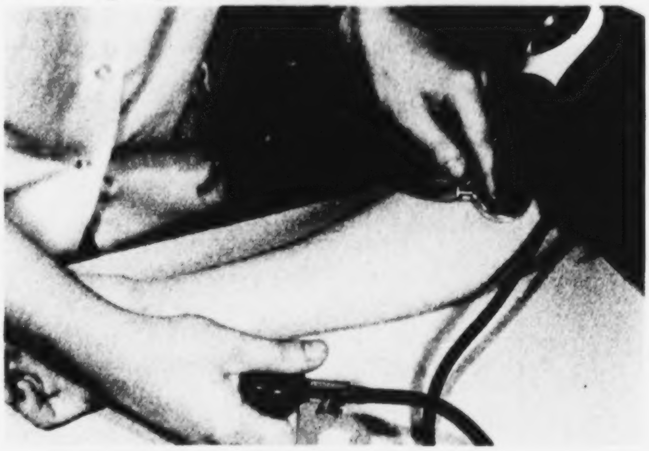
9. Place earpiece of stethoscope in ears

10. Locate brachial artery pulse with fingertips and place diaphragm of stethoscope over pulse beat

    NOTE: You will probably not be able to hear pulse beat through stethoscope at this point.

11. Tighten screw on rubber bulb of sphygmomanometer

12. Inflate cuff by squeezing bulb repetitively, listening for korotkoff sounds to appear and then cease; inflate cuff about 20 mmHg higher after pulse sounds diminish



13. Open thumb valve of bulb slightly, gradually releasing the air in the cuff.

14. Observe the manometer gauge at eye level, not the level of the meniscus, when the first strong pulse sound is heard; this is the systolic pressure

15. Continue to listen while gradually releasing more air from the cuff and allowing the gauge to lower about 2 to 3 mmHg for each pulse beat

16. Observe the manometer gauge at eye level when the last distinct loud sound is heard; this is the diastolic pressure

    NOTE: It is important to hold the stethoscope very still and not move your hands, as sounds of these movements may be confused with pulse sounds.

17. Open bulb valve to deflate cuff fully; pressure will fall to zero

18. Record systolic and diastolic pressures immediately

    NOTE: Blood pressure is written 120/80 and is read as 120 over 80.

19. Wait one minute with cuff deflated, then repeat the procedure; taking blood pressure again to check for accuracy

    NOTE: Blood pressure measurements can fluctuate slightly in a short period of time.

20. Remove blood pressure cuff from arm and make resident comfortable

21. Clean earpiece of stethoscope with antiseptic

22. Return equipment

23. Wash hands

24. Record blood pressure information on log

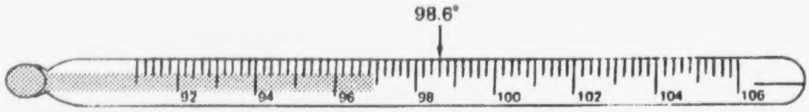
25. Report blood pressure readings that deviate from usual readings to supervisor

ACTIVITY 1

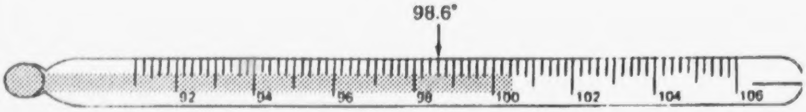
Read Thermometers

PART I

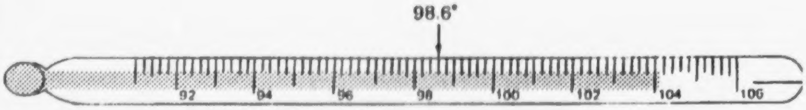
Read the temperatures shown on the following Fahrenheit thermometer illustrations. Write your answers in the blanks.


98.6°
92
94
96
98
100
102
104
106

1. ______

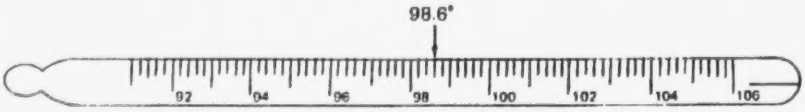

98.6°
92
94
96
98
100
102
104
106

2. ______

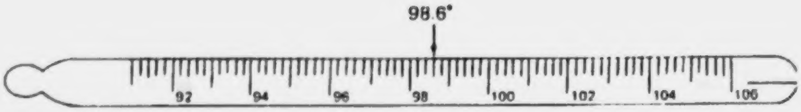

98.6°
92
94
96
98
100
102
104
106

3. ______

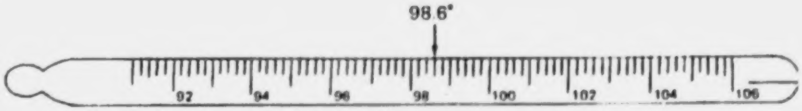
Draw a line on each Fahrenheit thermometer illustration to indicate the following temperatures.


98.6°
92
94
96
98
100
102
104
106

4. 99.2° F

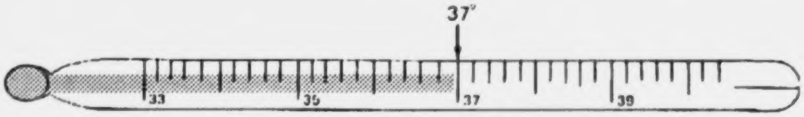

98.6°
92
94
96
98
100
102
104
106

5. 101.8° F


98.6°
92
94
96
98
100
102
104
106

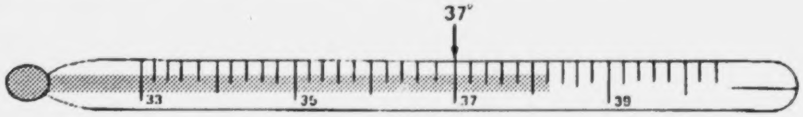
6. 103° F

PART II Read the temperatures shown on the following centigrade thermometer illustrations. Write your answers in the blanks.

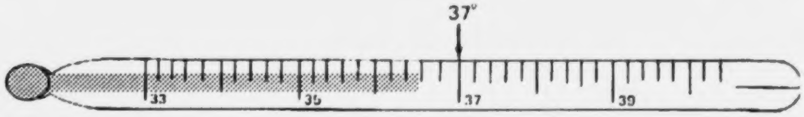

37°
33
35
37
39

1. ______

(**NOTE:** The average normal temperature is 37° C.)

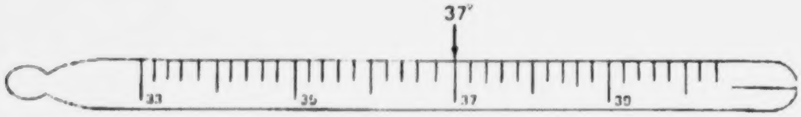

37°
33
35
37
39

2. ______

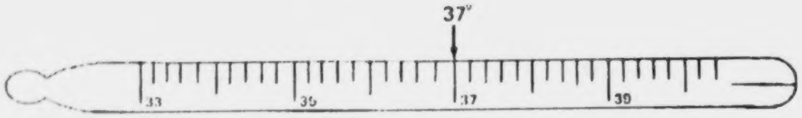

37°
33
35
37
39

3. ______

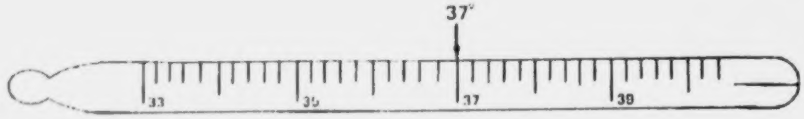
Draw a line on each centigrade thermometer illustration to indicate the following temperatures.


37°
33
35
37
39

4. 37.2° C


37°
33
35
37
39

5. 39.4° C


37°
33
35
37
39

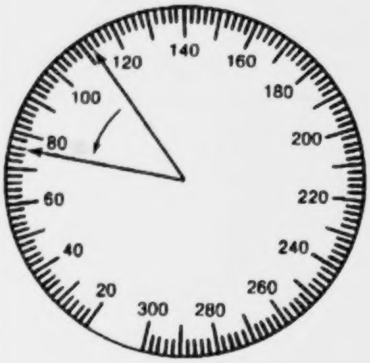
6. 38.6° C

ACTIVITY 2

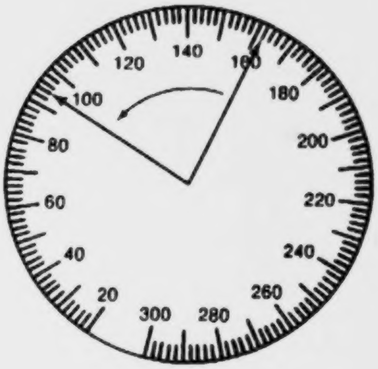
Read Sphygmomanometer Gauges

Marks on both aneroid and mercury gauges are spaced at regular intervals. The long marks are ten mmHg apart, and the short marks are two mmHg apart.

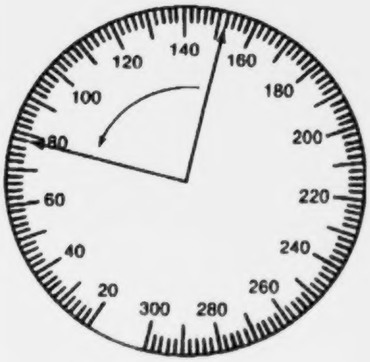
Read the following illustrations of gauges. Write in the blanks the blood pressure shown.


120
140
160
180
200
220
240
260
280
300
20
40
60
80
100

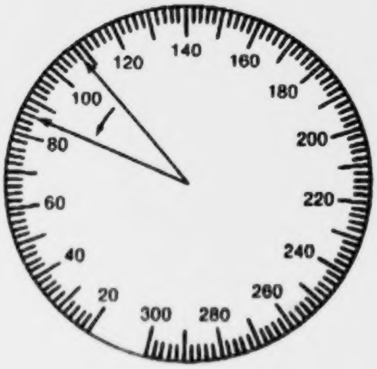
1. BP =__________


120
140
160
180
200
220
240
260
280
300
20
40
60
80
100

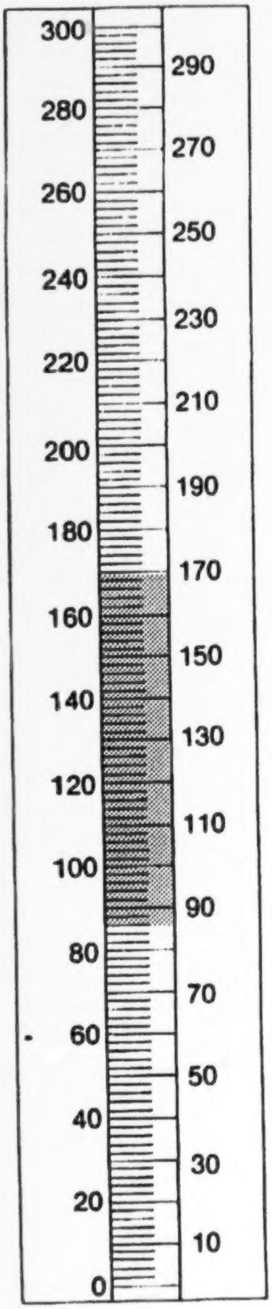
2. BP = __________

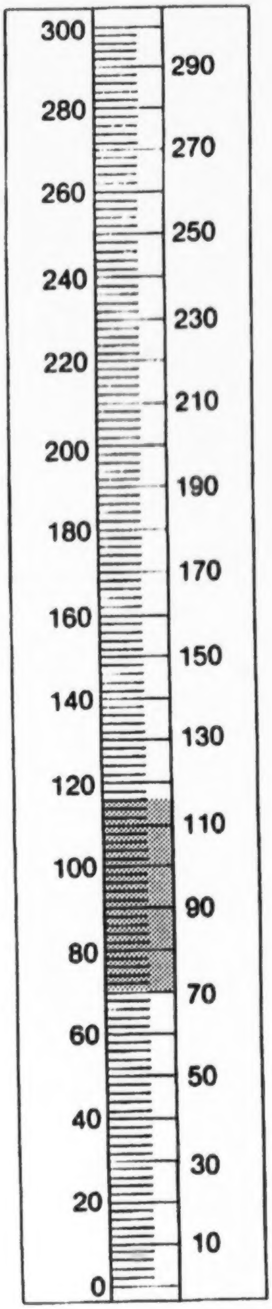

120
140
160
180
200
220
240
260
280
300
20
40
60
80
100

3. BP = __________


120
140
160
180
200
220
240
260
280
300
20
40
60
80
100

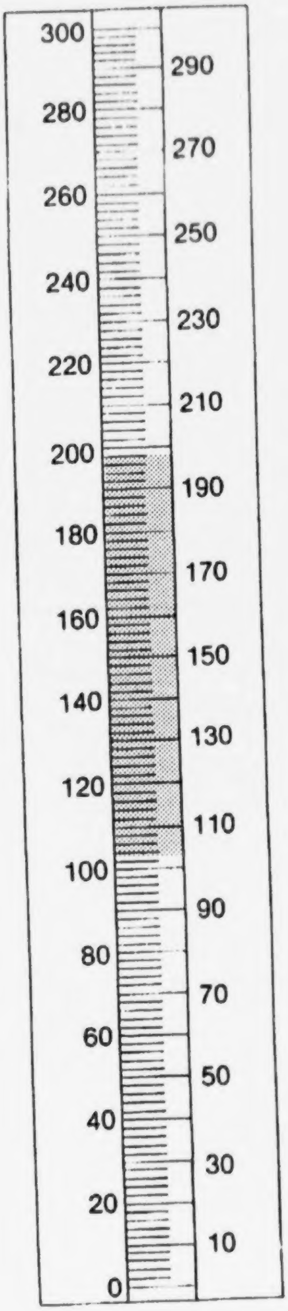
4. BP = __________

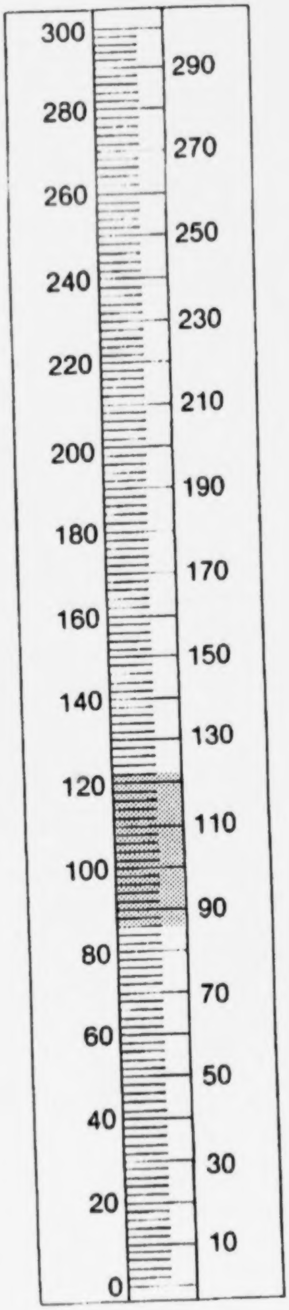




5. BP = ___________ 6. BP = __________

222





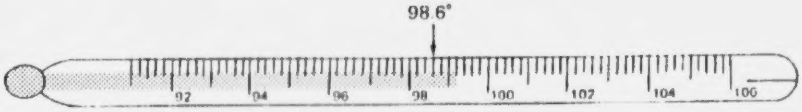
6. BP =__________

7. BP = __________

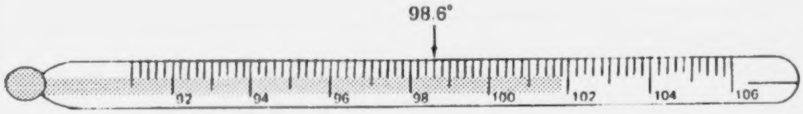
Activity Sheet 1

PART I

1. 97° F
2. 100.6° F
3. 104.2° F
4.


98.6°
92
94
96
98
100
102
104
106

5.


98.6°
92
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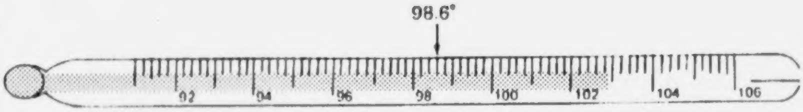
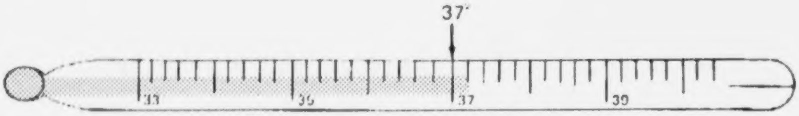
100
102
104
106

6.

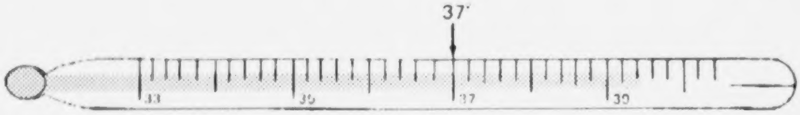

98.6°
92
94
96
98
100
102
104
106

PART II

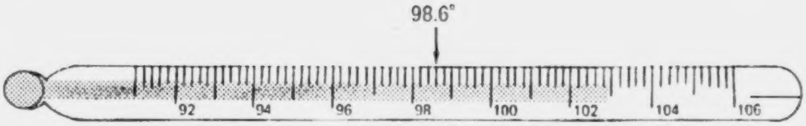
1. 37° C
2. 38.2° C
3. 36.6° C
4.


37°
33
35
37
39

5.


37°
33
35
37
39

6.


98.6°
92
94
96
98
100
102
104
106

Activity Sheet 2

1. 112/76
2. 162/94
3. 152/78
4. 108/86
5. 170/86
6. 116/70
7. 198/104
8. 122/76

TEST

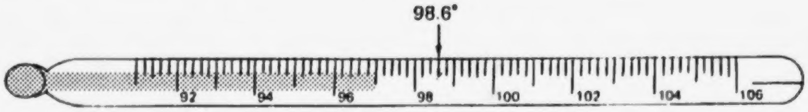
MEDICATION ADMINISTRATION TECHNICIAN
OBTAIN VITAL SIGNS

Name______________________________**Score**____________

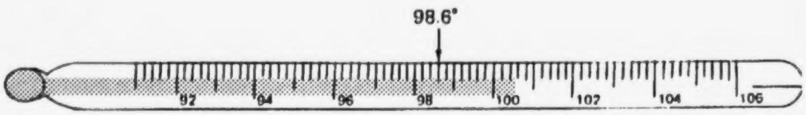
PART I

OBJECTIVE 1

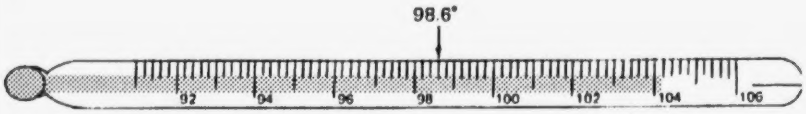
1. Read the following thermometer illustrations. Write the correct temperatures in the blanks; indicate whether the reading is Celsius (C) or Fahrenheit (F).


98.6°
92
94
96
98
100
102
104
106

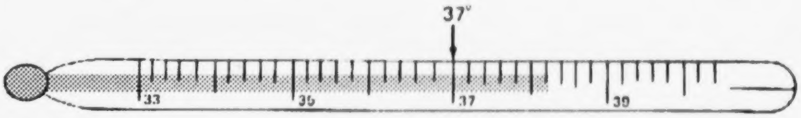
a. ____________


98.6°
92
94
96
98
100
102
104
106

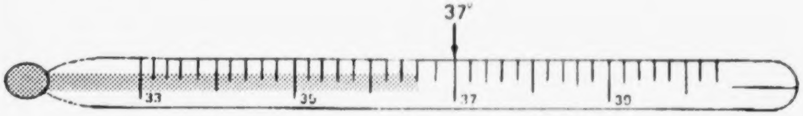
b. ____________


98.6°
92
94
96
98
100
102
104
106

c.

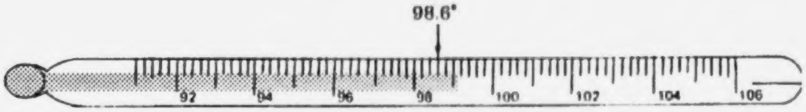

37°
33
35
37
39

d. ____________

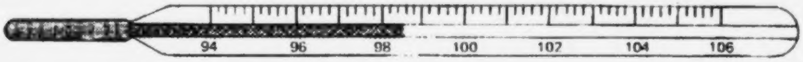

37°
33
35
37
39

e. ____________

2. Distinguish between illustrations of oral and rectal thermometers. Write "Oral" or "Rectal" in the correct blanks.



a. ____________



b. ____________

3. Write the normal Fahrenheit temperatures for readings taken with the following methods. Write the correct temperatures in the blanks.

a. Axillary ______________________________

b. Oral ______________________________

c. Rectal ______________________________

OBJECTIVE 2

4. Match the following terms associated with pulse and respirations with their correct definitions. Write the correct numbers in the blanks.

1. Respiration
2. Pulse
3. Tachycardia
4. Bradycardia
5. Intercostal space

___ a. Pulse rate over 100 beats per minute

___ b. Measurement of heart rate

___ c. Act of breathing in and out; measured in breaths per minute

___ d. Area between the ribs of the chest

___ e. Heart rate that drops below 60 beats per minute

Write the correct answers in the blanks.

5. Write the normal blood pressure for healthy adults 20 to 40 years old _____ .

6. List the upper limits of normal blood pressure for individuals who are seventy-five years or older _____ .

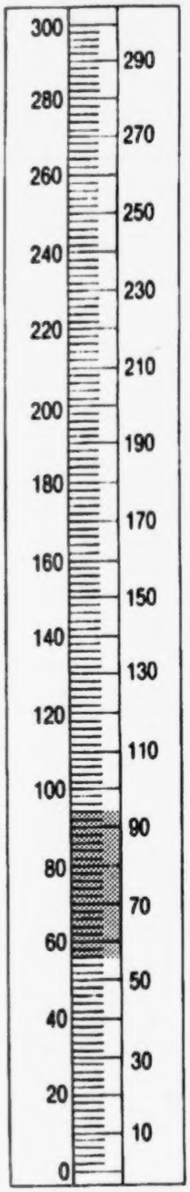
7. Blood pressure cuff should be _____ the diameter of the arm.

8. Which arm would you use for taking blood pressure if the resident has had surgery on one shoulder? ____________

9. The limb used for blood pressure reading must be positioned ____________________________ .

OBJECTIVE 3

10. Read the following illustrations of blood pressure gauges. Write the correct answers in the blanks.


300
290
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190
180
170
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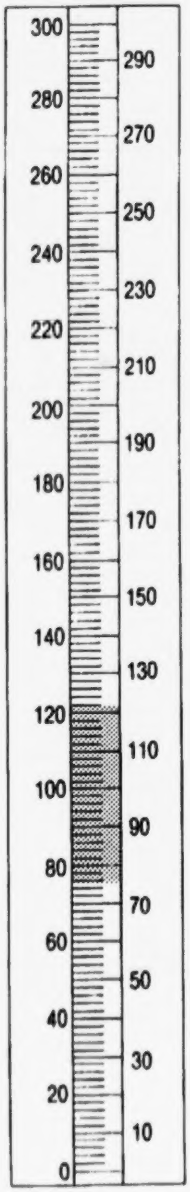
10
0

a. ________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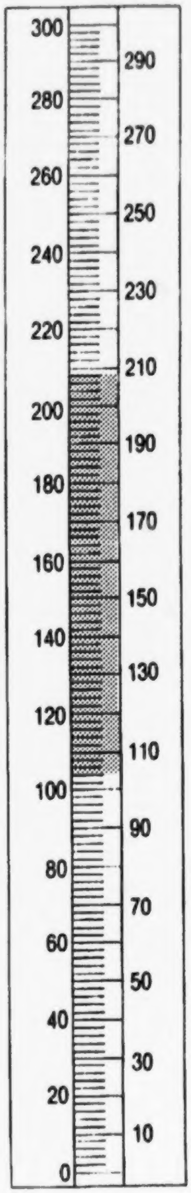
10
0

b.________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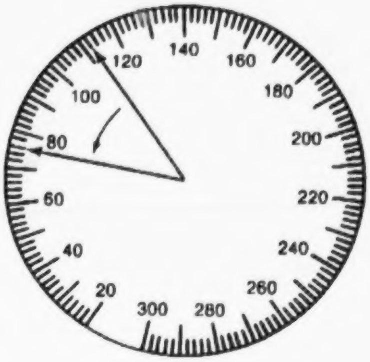
10
0

c.________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220
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240
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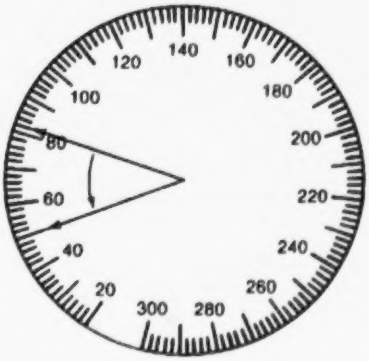
260
300
280


120
140
160
180
100
80
200
60
220
40
240
20
260
300
280

d. ________

e. ________

OBJECTIVE 4

11. List five guidelines for recording vital signs information. Write the guidelines in the blanks.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

12. Document correctly the vital signs obtained in the performance part of the test.

(Continue with PART II)

Name ______________________________

PART II

Your instructor will provide you with assignments that involve taking vital signs. You must go through all steps required to complete the each procedure.

Your assignments are listed below and will be further explained by your instructor.

Procedure Assignment	**Date Completed**
Obtain temperature readings.	
Take pulse and respiration.	
Take blood pressure.	

ANSWERS TO TEST

MEDICATION ADMINISTRATION TECHNICIAN
OBTAIN VITAL SIGNS

PART I

1. a. 97° F
   b. 100.6° F
   c. 104.2° F
   d. 38.2° C
   e. 36.6° C

2. a. Rectal
   b. Oral

3. a. 97.6° F
   b. 98.6° F
   c. 99.6° F

4. a. 3
   b. 2
   c. 1
   d. 5
   e. 4

5. 140/90

6. 180/100

7. *20 percent wider* than the diameter of the arm

8. Arm opposite affected shoulder

9. At the level of the heart

10. a. 94/56
    b. 122/76
    c. 208/104
    d. 112/76
    e. 82/50

11. Answers should include any five of the following

    a. Make sure resident's name is clearly marked on the form
    b. Write clearly so that entry can be easily read
    c. Use clearly written numbers and decimal points accurately
    d. Document date and time vital signs were taken
    e. Identify method of measuring temperature (oral, rectal, or axillary), and scale of temperature (°C or °F)
    f. Identify units of liquid measure (ounces or cc)
    g. Use ink on resident's record
    h. Never erase or cover any previously recorded writing
    i. Sign your name clearly on designated space on document if required by your agency

12. Evaluated to the satisfaction of the instructor

PART II Performance skills evaluated to the satisfaction of the instructor

EVALUATION FORM 1

MEDICATION ADMINISTRATION TECHNICIAN
OBTAIN VITAL SIGNS

Name______________________________

PROCEDURE **Clean a mercury thermometer**

EQUIPMENT

- Thermometer and case
- Soap
- Cool tap water
- Cotton balls
- Two small basins
- Antiseptic solution

Did the student:	Yes	No
1. Wash hands		
2. Gather equipment		
3. Fill one basin with cool water, soap		
4. Fill other basin with antiseptic solution		
5. Place thermometer in soapy water		
6. Wipe from stem to tip		
7. Rinse in cool water		
8. Place thermometer in antiseptic solution		
9. Remove, rinse with cool water		
10. Dry with clean cotton balls		
11. Store thermometer		
12. Discard cotton balls		
13. Store equipment		

Did the student:

	Yes	No
14. Wash hands		
15. Clean rectal thermometers separately from oral thermometers		
16. Use proper body mechanics		

The student has satisfactorily completed the procedure "Clean a Mercury Thermometer" according to the steps outlined.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

EVALUATION FORM 2

MEDICATION ADMINISTRATION TECHNICIAN
OBTAIN VITAL SIGNS

Name____

PROCEDURE **Shake down a mercury thermometer**

EQUIPMENT

- Mercury thermometer

Did the student:	Yes	No
1. Wash hands		
2. Hold stem end firmly between thumb and forefinger		
3. Check condition of thermometer		
4. Check area		
5. Snap wrist downward to shake thermometer		
6. Check mercury level		
7. Shake thermometer until level is below 95.0° F		
8. Use proper body mechanics		

The student has satisfactorily completed the procedure "Shake Down a Mercury Thermometer" according to the steps outlined.

__________ ______________________________
(Date) (Evaluator's Signature)

____
(Evaluator's Position)

EVALUATION FORM 3

MEDICATION ADMINISTRATION TECHNICIAN
OBTAIN VITAL SIGNS

Name____

PROCEDURE **Take an oral temperature (with a mercury thermometer)**

EQUIPMENT AND MATERIALS

- Mercury thermometer with case
- Watch with a second hand
- Clean tissue
- Paper and pen
- Clean, disposable gloves (optional)
- Plastic thermometer covers (optional)

Did the student:	Yes	No
1. Wash hands		
2. Gather equipment		
3. Explain procedure to client		
4. Position client		
5. Put on gloves (optional)		
6. Shake down thermometer		
7. Rinse bulb in cool water or put cover on thermometer		
8. Place bulb gently under client's tongue		
9. Leave thermometer in place for 8 minutes, staying with client		
10. Remove thermometer carefully		
11. Wipe thermometer from stem to bulb with tissue		

Did the student:	Yes	No
12. Read thermometer and record immediately		
13. Shake down thermometer to 95° F or below		
14. Clean thermometer		
15. Return thermometer to case		
16. Remove, discard gloves		
17. Make client comfortable		
18. Return supplies to storage		
19. Wash hands		
20. Record temperature on log plan		
21. Report any deviations from usual temperature to supervisor		
22. Use proper body mechanics		

The student has satisfactorily completed the procedure "Take an Oral Temperature" (with mercury thermometer) according to the steps outlined.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

EVALUATION FORM 4

MEDICATION ADMINISTRATION TECHNICIAN
OBTAIN VITAL SIGNS

Name____

PROCEDURE

Take an oral temperature (with electronic thermometer)

EQUIPMENT AND SUPPLIES

- Electronic thermometer
- Oral probe for thermometer
- Disposable probe cover
- Paper and pen
- Clean, disposable gloves

Did the student:	Yes	No
1. Wash hands		
2. Gather equipment		
3. Put on gloves		
4. Plug probe into unit		
5. Activate electronic thermometer		
6. Put cover on probe		
7. Explain procedure to client		
8. Position client		
9. Place probe under client's tongue		
10. Ask client to close mouth gently around probe		
11. Leave probe in place until the signal		
12. Read display, record immediately		
13. Remove probe from client's mouth		

Did the student:	Yes	No
14. Discard probe cover		
15. Remove, discard gloves		
16. Make client comfortable		
17. Return thermometer to charging unit		
18. Wash hands		
19. Record temperature on client's log		
20. Report any deviations from usual temperature to caregiver or supervisor		
21. Use proper body mechanics		

The student has satisfactorily completed the procedure "Take an Oral Temperature" (with electronic thermometer) according to the steps outlined.

(Date) (Evaluator's Signature)

(Evaluator's Position)

EVALUATION FORM 5	MEDICATION ADMINISTRATION TECHNICIAN OBTAIN VITAL SIGNS

Name____

PROCEDURE **Take an axillary temperature (with mercury thermometer)**

EQUIPMENT
- Mercury thermometer
- Watch with a second hand
- Paper and pen
- Clean tissue

Did the student:	Yes	No
1. Wash hands		
2. Gather equipment		
3. Explain procedure to client		
4. Position client		
5. Remove client's arm from sleeve		
6. Pat axilla dry with tissue		
7. Check thermometer		
8. Shake mercury level down to 95° F or less		
9. Place thermometer in axilla with mercury tip pointing slightly upward toward shoulder		
10. Place client's arm across chest or abdomen		
11. Stay with client 10 minutes while thermometer is in place		
12. Remove thermometer		

Did the student:	Yes	No
13. Wipe with tissue from stem downward		
14. Read, record temperature immediately with *ax*		
15. Put client's arm back in sleeve; make client comfortable		
16. Shake mercury level down to 95° F or below		
17. Clean thermometer		
18. Return equipment to storage area		
19. Wash hands		
20. Record temperature with *ax* on log		
21. Report any deviations from normal temperature to supervisor		
22. Use proper body mechanics		

The student has satisfactorily completed the procedure "Take an Axillary Temperature" (with mercury thermometer) according to the steps outlined.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

EVALUATION FORM 6 | **MEDICATION ADMINISTRATION TECHNICIAN**
OBTAIN VITAL SIGNS

Name____

PROCEDURE **Take an axillary temperature (with electronic thermometer)**

EQUIPMENT

- Electronic thermometer
- Disposable probe cover
- Paper and pen
- Clean tissue

Did the student:	Yes	No
1. Wash hands		
2. Assemble equipment		
3. Plug probe into unit		
4. Activate electronic thermometer		
5. Put cover on probe		
6. Explain procedure to client		
7. Position client		
8. Remove client's arm from sleeve		
9. Pat axilla dry if it is damp		
10. Place probe tip in axilla		
11. Position client's arm		
12. Leave probe in place until signal		
13. Read, record temperature as *ax* immediately		
14. Press eject button to release cover		

Did the student:	Yes	No
15. Put client's arm back in sleeve		
16. Return electronic thermometer to charging unit		
17. Wash hands		
18. Record temperature on log, writing *ax*		
19. Report any deviations from normal temperature to supervisor		
20. Use proper body mechanics		

The student has satisfactorily completed the procedure "Take an Axillary Temperature" (with electronic thermometer) according to the steps outlined.

__________ ______________________________

(Date) (Evaluator's Signature)

____

(Evaluator's Position)

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EVALUATION FORM 7

MEDICATION ADMINISTRATION TECHNICIAN
OBTAIN VITAL SIGNS

Name____

PROCEDURE **Take a rectal temperature (with mercury thermometer)**

EQUIPMENT

- Mercury rectal thermometer
- Watch with second hand
- Paper and pen
- Clean tissues
- Lubricant
- Clean, disposable gloves

Did the student:	Yes	No
1. Wash hands		
2. Gather equipment		
3. Check type, condition of thermometer		
4. Shake mercury level to 95° F or below		
5. Explain procedure to client		
6. Provide privacy		
7. Put on gloves		
8. Lubricate bulb		
9. Uncover only the rectal area		
10. Insert thermometer a. Raise upper buttock		
b. Insert bulb gently into rectum 1" to 1 1/2" for adult		
11. Hold thermometer in place 8 minutes		
12. Remove thermometer		

Did the student:	Yes	No
13. Wipe thermometer from stem to bulb; discard tissue		
14. Read, record temperature as *R*		
15. Clean rectal area; discard tissue		
16. Make client comfortable		
17. Shake down mercury level		
18. Clean thermometer; replace in holder		
19. Remove, discard gloves		
20. Wash hands		
21. Return equipment, supplies to storage		
22. Record temperature on log, writing *R*		
23. Report deviation from normal temperature to supervisor		
24. Use proper body mechanics		

The student has satisfactorily completed the procedure "Take a Rectal Temperature" (mercury thermometer) according to the steps outlined.

__________ (Date)

______________________________ (Evaluator's Signature)

______________________________ (Evaluator's Position)

EVALUATION FORM 8

MEDICATION ADMINISTRATION TECHNICIAN
OBTAIN VITAL SIGNS

Name____

PROCEDURE **Take a rectal temperature (electronic thermometer)**

EQUIPMENT

- Electronic thermometer
- Rectal probe
- Disposable probe cover
- Lubricant
- Clean tissues
- Paper and pen
- Clean, disposable gloves

Did the student:	Yes	No
1. Wash hands		
2. Assemble equipment		
3. Explain procedure to client		
4. Provide privacy		
5. Put on gloves		
6. Plug probe into unit		
7. Activate electronic thermometer		
8. Put cover on tip		
9. Lubricate tip of probe cover		
10. Position client		
11. Uncover rectal area		
12. Insert thermometer a. Raise upper buttock		

Did the student:	Yes	No
b. Insert probe gently into rectum 1" to 1 1/2" for adult		
13. Hold probe in place until electronic signal		
14. Read temperature display		
15. Remove probe		
16. Write down temperature with *R*		
17. Press eject button to remove probe cover		
18. Return probe to holder		
19. Clean anal area; discard tissue		
20. Make client comfortable		
21. Remove, discard gloves		
22. Replace electronic thermometer in charging unit		
23. Store supplies and equipment		
24. Wash hands		
25. Record temperature with *R* on log		
26. Report any deviation from usual temperature to supervisor		
27. Use proper body mechanics		

The student has satisfactorily completed the procedure "Take a Rectal Temperature" (electronic thermometer) according to the steps outlined.

__________ (Date)

______________________________ (Evaluator's Signature)

______________________________ (Evaluator's Position)

EVALUATION FORM 9

MEDICATION ADMINISTRATION TECHNICIAN
OBTAIN VITAL SIGNS

Name____

PROCEDURE **Take pulse and respirations (radial pulse)**

EQUIPMENT

- Watch with second hand
- Pen and paper

Did the student:	Yes	No
1. Wash hands		
2. Gather equipment		
3. Explain procedure to client		
4. Place client's arm in comfortable position at level of heart		
5. Locate radial pulse		
6. Exert slight pressure over radial artery for 1 minute while counting pulse		
7. Count respirations for 1 minute while still holding client's wrist		
8. Record pulse, respirations immediately		
9. Make client comfortable		
10. Wash hands		
11. Record pulse, respirations on log		
12. Report deviations from normal pulse, respirations to supervisor		
13. Use proper body mechanics		

The student has satisfactorily completed the procedure "Take Pulse and Respirations" (radial pulse) according to the steps outlined.

(Date) (Evaluator's Signature)

(Evaluator's Position)

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EVALUATION FORM 10

MEDICATION ADMINISTRATION TECHNICIAN
OBTAIN VITAL SIGNS

Name____

PROCEDURE **Take blood pressure**

EQUIPMENT AND MATERIALS

- Sphygmomanometer
- Stethoscope
- Pen and paper
- Cotton balls with antiseptic or antiseptic gauze wipes

Did the student:	Yes	No
1. Wash hands		
2. Gather equipment		
3. Explain procedure to client		
4. Position client		
5. Uncover client's arm		
6. Check size of cuff		
7. Put cuff on client's arm 1" above elbow, with bladder centered over brachial artery		
8. Clean earpieces, diaphragm of stethoscope		
9. Place earpieces in ears		
10. Locate pulse with fingertips; place diaphragm over pulse beat		
11. Tighten screw on sphygmomanometer bulb		
12. Inflate cuff about 20 mmHg higher than last pulse sounds		

Did the student:	Yes	No
13. Open thumb valve slightly		
14. Observe gauge at eye level at first strong pulse sound		
15. Release more air, allowing gauge to lower 2 or 3 mmHg for each pulse beat		
16. Observe gauge at eye level at last distinct loud sound		
17. Open bulb valve		
18. Record systolic, diastolic pressures immediately		
19. Repeat procedure one minute later		
20. Remove cuff from client's arm; make client comfortable		
21. Clean earpieces of stethoscope		
22. Return equipment		
23. Wash hands		
24. Record blood pressure on log		
25. Report deviations from usual findings to supervisor		
26. Use proper body mechanics		

The student has satisfactorily completed the procedure "Take Blood Pressure" according to the steps outlined.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

OBJECTIVE SHEET

MEDICATION ADMINISTRATION TECHNICIAN
EXPLORE LEGAL ISSUES

INTRODUCTION

Workers in almost every occupation are affected by federal, state, or local laws that protect employees, employers, and property. The position as a medication administration technician is no different; it is governed by regulations and policies that protect not only the resident and agency, but also those of the medication administration technician.

Knowing and understanding legal issues will better prepare you to handle them when on the job. For example, did you know:

Handicapped people have constitutional rights?

Federal laws entitle handicapped people to special privileges?

You must spend much of your work time providing documentation?

You are required by law to report cases of abuse, regardless of the resident's age?

When you have completed your medication administration technician training, you will work in a group home or residential care facility. You need to be aware of the broad implications of liability, the legal process, and the damages that could be established by a client against you and/or the employer/facility you work for when providing care and administering medications.

UNIT OBJECTIVE

After completing this unit, you should be able to explain what constitutes liability and provide information about liability issues which face the administrator, staff, and support personnel involved in sheltered workshops, work activity centers, group homes, and residential care facilities.

SPECIFIC OBJECTIVES

1. Define legal terms.
2. Explain the importance of proper documentation when administrating medications.
3. List the information needed to report abuse.

4. List the steps for reporting abuse.

5. Explain how the medication administration technician must handle privileged information.

UNIT CONTENTS

- Objective sheet
- Instructor's guide
- Instructor's supplements

  Supplement 1 — Pretest

  Supplement 2 — Answers to pretest
- Transparency Master 1 — Steps for Reporting Abuse
- Information sheet
- Assignment Sheet 1 — Interpret Legal Issues
- Answers to assignment sheet
- Student Supplement 1 — Civil Liability/Lawsuits
- Test
- Answers to test

SUGGESTED ACTIVITIES

- **Review unit and plan presentation.**

  1. Study the specific objectives to determine which will be covered in your presentation. Decide which objectives should be taught to which students.

  2. Determine scope and sequence of added objectives. Design and develop support materials, including evaluation techniques, for additional objectives.

- **Obtain materials needed to supplement unit.**

  1. Guidelines for workers with AIDS residents

    - "Joint Advisory Notice: Protection against Occupational Exposure to Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV)" Department of Labor/Department of Health and Human Services, October 19, 1987

  2. Competency profiles

     NOTE: Competency profiles for this book are available from the Curriculum and Instructional Materials Center, Oklahoma State Department of Vocational and Technical Education, 1500 West Seventh Avenue, Stillwater, OK 74074-4364.

- **Provide group instruction as required.**

  1. Review instructional outline for this unit. Modify suggestions to suit class needs and plan activities for each class period.

  2. Prepare classroom.

     a. Put up a bulletin board containing newspaper articles about abuse and a poster of Constitutional Rights of the Handicapped and Bill of Rights for Developmentally Disabled Services Division Residents.

     b. Display pamphlets, books, and other information on abuse.

  3. Introduce unit.

     - Discuss unit introduction on the objective sheet.

  4. Discuss unit objective.

  5. Discuss specific objectives. Emphasize how accomplishing the specific objectives will lead to meeting the unit objective. Relate the objectives to your introduction.

  6. Discuss information sheet.

     a. Discuss Objective 1.

- Discuss legal terms and how they apply to medication administration technicians.

b. Discuss Objective 2.

- Have students brainstorm about what might happen if the medication administration technician does not provide documentation concerning the resident's vital signs, medication, food, reactions, or other information.

- Discuss the need for proper written records.

c. Discuss Objectives 3 and 4.

- Point out that the United States has more than one million reported victims of child abuse each year.

- Discuss the obligation of private citizens and professionals to report abuse if they suspect that a child under age eighteen has been abused, neglected, or is in danger of being abused. Failure to report abuse is a crime.

- Point out that the term "child abuse" often involves emotional abuse and neglect, as well as physical and sexual abuse.

- Discuss adult abuse; point out that children are not the only victims of abuse.

- Have students read and discuss the state's Department of Human Services policy on behavior management and mistreatment.

- Remind students that they are required by law to report suspected abuse to the Department of Human Services. They must follow all the steps. Their name will not be used in the investigation.

- Point out that a facility may have a policy that the supervisor will handle all reports, if the supervisor says "don't worry—I'll take care of it", that is fine; however, the medication administration technician is required by law to also report the suspected abuse to DHS officials.

  NOTE: This double check will relieve any possibility of a cover-up of the incident.

- Show Transparency 1, Steps for Reporting Abuse.

d. Discuss Objective 5.

- Discuss problems that might occur if the medication administration technician is not careful with privileged information.
- Point out that confidentiality protects the resident, and that this protection may mean that the medication administration technician will not always know if a resident has a condition such as AIDS.
- Point out problems in the home with "found" items: such as, blades, knives, needles, or other dropped objects.
- Caution students about handling gloves, bandages, body fluids, etc.
- Point out that agencies have legal responsibilities toward the medication administration technician whose work exposes them to hepatitis B virus (HBV) or human immunodeficiency virus (HIV). Emphasize that providers should check with their agencies for further guidelines.
- Discuss Assignment Sheet 1 — Interpret Legal Issues.

7. Give test.

8. Reteach and retest as required.

- **Review individual and group performance to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.**

UNIT REFERENCE

Medication Administration Training. East Central University, Ada, Oklahoma.

SUPPLEMENT 1 **Pretest**

Name______________________________**Score** __________

DIRECTIONS **Answer the following questions.**

1. Define:

a) contract

____

____

b) liability

____

____

c) tort

____

____

d) law

____

____

e) abuse

____

____

2. Explain the importance of proper documentation when administering medications.

3. List the pieces of information needed for reporting a case of abuse.

4. List the steps in the process of reporting a case of abuse.

5. Explain how the medication administration technician must handle privileged information.

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SUPPLEMENT 2 Answers to Pretest

Objective 1

a. A legal agreement made by two or more people
b. Something for which one is responsible
c. A wrong committed against another person or the person's property
d. A rule made by a governing body
e. Any purposeful mistreatment of a person by another person or persons; includes not only physical abuse or deprivation, but also mental and verbal abuse

Objective 2

Answers should include the following

a. Proof that medication was administered
b. Continuity of care
c. Legal responsibility

Objective 3

a. Name, age, and gender of the abuse victim and caregivers
b. Address, phone number, or directions to victim's home
c. Nature and extent of the abuse, including evidence of previous abuse
d. Current condition of the abuse victim
e. Any other information that would be helpful in establishing the cause of the injuries and the identity of the person causing them

Objective 4

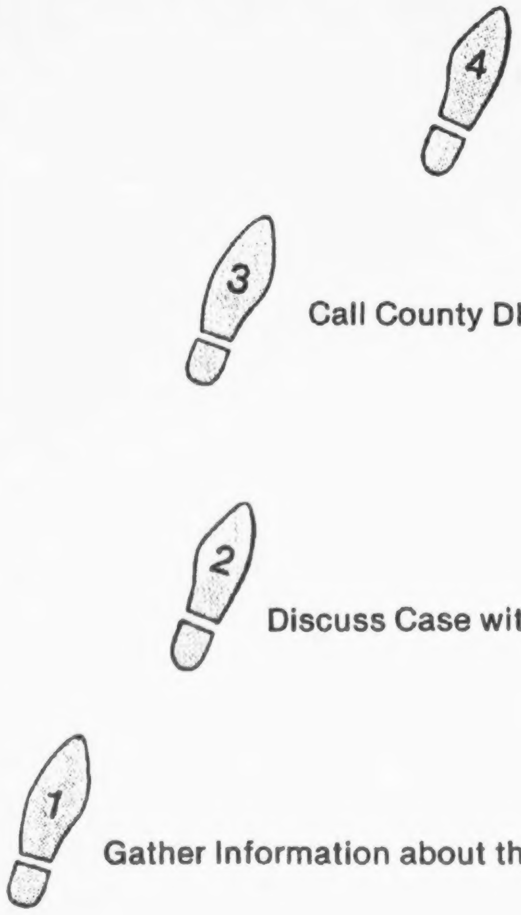
a. Gather all necessary information on the case
b. Contact your supervisor and discuss the case
c. Call the County Department of Human Services (DHS)
d. Submit a written report to the DHS

Objective 5

Answer should include the following

a. Keep privileged information confidential
b. Get written consent from the resident or the resident's legal guardian, if you need to share privileged information with someone other than your supervisor
c. Report any information such as cases of abuse and communicable diseases to the proper officials

Steps for Reporting Abuse



Submit Written Report
to County DHS

Call County DHS

Discuss Case with Your Supervisor

Gather Information about the Case

OBJECTIVE 1

Define legal terms

Abuse — Any purposeful mistreatment of a person by another person or persons; includes not only physical abuse or deprivation, but also mental and verbal abuse

Confidential — Refers to information that is known only to certain people and should not be shared with others

Contract — Legal agreement made by two or more people

Law — Rule of conduct made by a governing body

Lawsuit — Legal action taken against a person (defendant) by another person (plaintiff); usually done for damages

Liability — Something for which one is responsible

Negligence — Unintentional wrong in which a person fails to act in a reasonable and careful manner and, thereby, causes harm to another person or that person's property; also known as neglect

Privileged information — Details or facts about a resident or family that are confidential

Tort — A wrong committed against another person or the person's property

OBJECTIVE 2

Explain the importance of proper documentation when administering medications.

INTRODUCTION

As you proceed through this course, you will soon discover that almost everything you do while caring for a resident must be written down. You must record medications taken, vital statistics taken, and a wealth of other information.
There is not room here to indicate everything that you should document. Specific information showing what, how, and when you should document has been discussed earlier in the course. At this point, you should know that proper documentation is vital not only to the resident's health and proper care, but also to your success as a medication administration technician.

IMPORTANCE OF DOCUMENTATION

Proof that medication was administered

EXAMPLE: If you administer a resident's medication but fail to write it down, the caregiver, nurse, or doctor may have no way to know that you gave the medication. Such a mistake could be dangerous: the resident may receive an extra dose of medication.

Continuity of care

EXAMPLE: The resident's caregivers depend on properly documented information so that they can resume care when you leave. When everything is written, the caregivers can read the records and see what is needed for continued care. If you forget to record something, the resident may receive an extra snack, an unnecessary treatment, or an extra dose of medication.

Legal responsibility

EXAMPLE: A resident's medical records are legal documents and are considered evidence in a court of law. By carefully documenting everything you do for the resident, you are making a legal record and protecting yourself against a possible lawsuit.

OBJECTIVE 3

List the information needed to report abuse

INTRODUCTION

Every year thousands of people, usually the elderly and children, are abused. Many of these victims are spared further abuse because someone reported their abusers. The victims whose cases were reported are the lucky ones. Others must live with the continual suffering caused by their abusers.

If you think your resident is being abused, look for some obvious signs.

EXAMPLES of Physical Abuse:
- Strange circular or linear red marks
- Small circular scars caused by a cigarette
- Burns on the feet from scalding water
- Frequent and unexplainable bruises

EXAMPLES of Emotional Abuse:
- Withdrawn
- Fearful

However, these are not the only forms of abuse. Depriving a person of food, medication, or any other necessity of life is another type of abuse.

INFORMATION NEEDED

Before reporting a suspected case of abuse, collect information such as:

- Name, age, and gender of abuse victim and caregivers
- Address, phone number, or directions to victim's home
- Nature and extent of the abuse, including evidence of previous abuse
- Current condition of the abuse victim
- Any other information that would be helpful in establishing the cause of the injuries and the identity of the person who caused the injuries

NOTE: If in doubt report suspected abuse to the appropriate official; even if you don't have all the information.

OBJECTIVE 4 List steps for reporting abuse

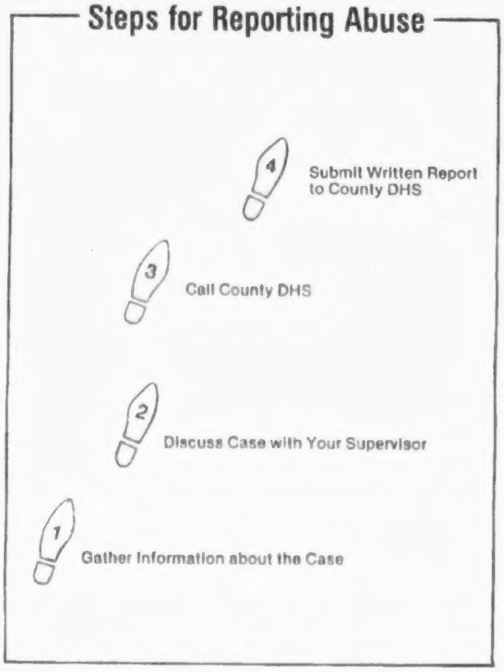
INTRODUCTION

The first step toward stopping the suffering is to report the abusers. Naturally, reporting someone for abusing another person is a sensitive subject. You may feel intimidated or fearful for reporting someone, especially if it is someone who pays your salary.

State law says that not reporting a known case of abuse is a misdemeanor. Additionally, state law protects persons who report abuse by giving them immunity (protection) from civil or criminal liability. **Your name will be kept anonymous.**

REMEMBER

Every report of suspected abuse is a responsible attempt to help an abused victim.



Steps for Reporting Abuse

4
Submit Written Report to County DHS
3
Call County DHS
2
Discuss Case with Your Supervisor
1
Gather Information about the Case

1. Gather all necessary information concerning the case.
2. Contact your supervisor and discuss the case with him or her.
3. Call the Department of Human Services (DHS) in the county in which the abuse took place and give officials all the necessary information.

   NOTE: If you are reporting a case of child abuse, ask for Child Protective Services. If you are reporting a case of adult abuse, ask for Adult Protective Services.

4. Submit a written report containing the same information to the county DHS.

   NOTE: State Law requires you to report suspected abuse to the Department of Human Services as well as the facility supervisor.

OBJECTIVE 5

Explain how a medication administration technician should handle privileged information

INTRODUCTION

When you administer medications you are exposed to a lot of information. Not only do you know the health status and treatment of the resident, but you may also know the family's financial status and personal problems.

You should consider the following types of information confidential:

- Anything concerning the resident's condition or treatment, such as developmental status, educational progress, or medications
- All of the resident's health records
- Information about the resident such as economic status, family problems, phone messages

CONFIDENTIALITY

- **Keep privileged information confidential**

  NOTE: In other words, you are not allowed to disclose privileged information to anyone. If the information relates to the resident's health or care, then you may discuss it with your supervisor. Otherwise, keep all privileged information confidential.

WRITTEN CONSENT

- **Get written consent from the resident or the resident's legal guardian if you need to share privileged information with someone other than your supervisor**

EXCEPTIONS

- **Report some pieces of information such as cases of abuse and communicable diseases to the proper officials**

  NOTE: You should be aware of the proper procedure for reporting all information to your agency. Confidentiality sometimes may mean that a medication administration technician will not always know if the resident has acquired immune deficiency syndrome (AIDS) or is infected with hepatitis B virus (HBV) or human immunodeficiency virus (HIV)

For workers whose jobs bring them in contact with blood or other body fluids, the Department of Labor, the Department of Health, and the Department of Human Services recommend...

- Work practices based on the assumption that all body fluids are infectious
- Agencies have written procedures about handling body fluids, disposing of sharp objects, and wearing protective clothing
- Monitoring for HBV and HIV at the request of a worker exposed to blood or other body fluids, with full confidentiality of results
- Medical counseling for workers whose results are positive

For workers who come in contact with body fluids, special precautions include...

- Frequent hand washing
- Special care with used needles
- Protecting cuts from body fluids
- Protective clothing if exposure to body fluids is anticipated
- Notification of supervisor if exposure occurs

ASSIGNMENT SHEET 1

Interpret legal issues affecting medication administration technicians.

INTRODUCTION

As administrators or staff personnel of sheltered workshops, work activity centers, group homes, and residential care facilities, each person needs to consider the liability of the institution and the liability of the facility personnel for acts or omission related to the discharge of respective duties. A brief overview of the potential liability areas, the duties imposed by law, the ramifications for noncompliance with standards of conduct, and problems resulting from errors and omission have been discussed. This includes the broad questions of liability, the legal process, and the damages that could be established by the plaintiff.

Are you aware of ...

1. The different types of civil liability that may be imposed on the facility or the individual employee or administrator of the facility?
2. The parties who may be named in a civil lawsuit?
3. The various legal bases of a civil lawsuit?
4. Potential areas of civil liability and possible ways to avoid a lawsuit?

DIRECTIONS

Read each of the following situations, then select the correct answer for each situation.

Situation 1

Mr. Chance, the owner of XYZ Residential Care Facility, hires Janet as a medication aide. Mr. Chance gives Janet a policy manual. During Janet's training period, her supervisor, Mrs. Wright, tells her not to worry about the following the manual. Mrs. Wright explains that the information is difficult to understand and that Janet should just do as she is taught during the training session. Janet begins doing things that she has not done at previous jobs because "everyone does it that way" (such as using white-out on medication sheets, noting that she gave a medication when she forgot to, borrowing medication from a client's drawer when another client needs it, etc..)

Janet arrives at work one day to discover that one of her clients received an overdose of Phenobarbital and died. She had forgotten to note on the medication sheet that she had already given the client his phenobarbital. The next medication administration technician gave him another dose.

The policy manual expressly forbids giving another dose of a potentially dangerous medication until it has been determined whether a dose has actually been missed by calling the medication administration technician or the doctor. This policy had not been followed.

The client's family sues XYZ and Janet.

1. Mr. Chance, the owner of the XYZ Residential Care Facility, was

    a. not liable (responsible); he did not give the medication.

    b. not liable since the supervisor told Janet to ignore the policy.

    c. not liable since Janet was given the policy manual.

    d. potentially liable for the acts of his employees, if they were acting within the scope of their employment.

2. Janet, the employee, was
    a. not negligent because she did what all the other employees were doing.

    b. potentially negligent because she was not following the minimal standard of care for a medication administration technician.

    c. not negligent because her supervisor told her to ignore the manual.

    d. not negligent because she wasn't the one who gave the extra dosage.

Situation 2

Judy is an employee of the XYZ Residential Care Facility. One day while she is taking dirty snack dishes back to the kitchen, she spills some food on the floor in the hallway. She ignores it since she is busy, thinking that the housekeeper will clean it up. A few minutes later Mrs. Smith, an 80-year-old resident, slips on the food. Mrs. Smith suffers a broken hip and sues XYZ Residential Care Facility.

1. Could XYZ Residential Care Facility be held liable?

2. Could Judy be held liable?

3. Does Mrs. Smith's advanced age have any influence on the liability suit?

4. Is it Judy's responsibility to clean up the food she spilled?

5. Could the housekeeper be held liable?

6. Judy has received a Summons. Which of the following action should she take?
    a. Notify her employer, insurance carrier (if she has one), and lawyer if one is not provided for her.

    b. Quit her job.

    c. Turn all the information and documentation over to her employer and let them represent her.

    d. Discuss the incident with the housekeeper before contacting her employer.

Situation 3

Gail is employed at the ABC Group home. Recently Jim, one of the residents, has been recently employed at a workshop. Gail enjoys his cheerful and outgoing personality. Gail realizes that starting to work is a big step for any resident, and wants to give Jim the support he needs to be successful.

After a few weeks Gail notices that Jim has become very quite and does not show the same kind of openness and friendly behavior usually observed. Gail continued to watch Jim. She tried to help Jim by asking how he was doing, if he liked his job, etc. Jim did not respond to Gail's questions. He did his work, but was not overly enthusiastic about his job, and he never talked about his family or friends. When Jim returned to the group home at night, he usually sat by himself and did not respond to the other residents. He appeared to be very nervous and irritable, but Gail thought it was a result of the recent changes in his life while working at the shelter.

During the next two weeks, Gail did not notice any improvement in Jim's behavior. She suspected that Jim needed to be evaluated to determine problems that have resulted in his withdrawn behavior. When she approached her supervisor, the supervisor remarked that it was nice to have a quiet resident who didn't bother everybody and she should be glad that there was one less resident to worry about.

If Gail suspects that Jim's behavior may be covering up other problems, what should she do?

DIRECTIONS

Develop a plan of action that a health care professional would follow when abuse is suspected. This plan should include all information necessary for following the steps for reporting abuse.

ASSIGNMENT SHEET 1

Situation 1

1. d

2. b

NOTE: All workers on site when the incident occurred could be liable.

Situation 2

1. Yes

2. Yes

3. No

4. Yes

5. Yes

6. a

Situation 3

Criteria for evaluation

Plan should include information necessary to report the situation to the appropriate officials. This should include the steps for reporting abuse. If possible, this would be an appropriate time for the student to role play with the DHS staff in reporting abuse.

SUPPLEMENT 1

Civil Liability/Lawsuits

A. What is a legal interpretation of liability?

The term "liability" is a broad legal term that encompasses every character of hazard or responsibility. Liability may be created by statute, such as a statutory duty or legal duty to act in a certain manner. Liability may also be imposed by common law standards or professional ethics or standards. Liability may extend to the institution of facility, or liability may be personal (extending to the individual employee).

B. What is meant by omission?

It has been said that each person is responsible for his or her own act. It is also true that a person may be held responsible for failure to act; this is known as an omission or failure to act when there was a duty to do.

C. What constitutes a basis for a liability suit?

Inaction as well as improper action constitute the basis for a liability suit. The basic example would be an assault and battery against a client by a facility employee. If a staff member hits a resident/client, the staff person would be liable (responsible) for the act. When the act is intentional or negligent, liability is established.

D. Who may be named in a civil lawsuit?

The administrator may also be held liable under the doctrine known as Respondent Superior. This doctrine is also known as the Master-Servant or Principal-Agent doctrine. Thus, under these doctrines, the facility or the administrator may be liable in certain cases of the wrongful acts of the employees

Liability of the employer is dependent upon knowledge of the employee's actions or omissions, a failure to prevent the injury, or the failure to foresee the consequences.

E. What are some of the legal bases for a civil lawsuit?

- Malpractice definition
- Any professional misconduct
- Unreasonable lack of skill or fidelity in professional or fiduciary duties
- Evil practices
- Illegal or immoral conduct
- Malpractice has historically been a legal term or art that was applicable only to doctors, health care providers, or lawyers. The principles of malpractice and general civil liability are similar.

F. What are potential areas of civil liability and possible ways to avoid lawsuit.

- Lack of supervision of the client (patient, resident)
- Lack of safe equipment (known as defects or inherent dangers)
- Lack of safe physical surroundings (physical plant, home, etc.)
- Physical abuse (assault and battery)
- Improper handling of medication, improper medical care and treatment
- Breach of contract, conversion of plant property, etc.
- Accidents involving transportation vehicles

G. How does one avoid the possibility of being named in a lawsuit?

There is no absolute protection. Everyone is subject to being sued. The best protection is prevention. Develop written policies, guidelines, and protocols. Make all employees, staff members, and clients aware of their respective duties and responsibilities.

It is important to have complete documentation of incidents (accidents), treatment records, and progress notes. Documentation and record keeping will afford a check-and-balance system for internal review as well as provide invaluable information should a lawsuit be filed.

Steps to take when civil liability has occurred in order to mitigate the damages

H. What records should the facility keep?

The following records are suggested:

- Written policies for employees, administrators, and clients

  Each position at a facility should have a written job description. A handbook should be written for clients. Some facilities require that personnel and clients sign statements indicating that policies have been read.

- Incident report forms

  Whenever an incident occurs at a facility, all persons who were involved (client, personnel, and even observers) should fill out incident report forms in their own words. It is important to stress that the client be able to fill out a form in his or her own words. These forms should be filed in appropriate files.

- Consent forms from clients

  Examples of these forms are: Permitting the facility to handle the client's money, treatment of minors, etc.

- Medical records, if applicable

  Facilities should have, for example, copies of a client's IHP (Individual Habilitation Plan), the client's doctor's name and telephone number, and a record of what medication a client is taking.

TEST

MEDICATION ADMINISTRATION TECHNICIAN
EXPLORE LEGAL ISSUES

Name______________________________**Score**____________

DIRECTIONS Answer the questions in the space provided.

OBJECTIVE 1 1. Define the following legal terms.

a. Tort

b. Lawsuit

c. Privileged information

d. Liability

e. Negligence

OBJECTIVE 2

2. Explain the importance of proper documentation in the medication administration technician field.

OBJECTIVE 3

3. List the pieces of information needed for reporting a suspected case of abuse.

OBJECTIVE 4

4 List the steps in reporting a suspected case of abuse.

OBJECTIVE 5

5. Explain how the medication administration technician should handle privileged information.

OBJECTIVE 1

a. A wrong committed against another person or the person's property
b. A legal action taken against a person (the defendant) by another person (the plaintiff), usually for damages
c. Details or facts about a resident or family that are confidential
d. Something for which one is responsible
e. An unintentional wrong in which a person fails to act in a reasonable and careful manner, causing harm to another person or that person's property

OBJECTIVE 2

Answers should include the following

a. Proof that an event took place (such as proof that medication was given, refused, etc.)
b. Continuity of care
c. Legal responsibility

OBJECTIVE 3

a. Name, age, gender of abuse victim and caregivers
b. Address, phone number, or directions to victim's home
c. Nature and extent of the abuse, including evidence of previous abuse
d. Current condition of the abuse victim
e. Any other information that would be helpful in establishing the cause of the injuries and the identity of the person who caused the injuries

OBJECTIVE 4

a. Gather all necessary information about the case
b. Contact supervisor and discuss the case
c. Call the County Department of Human Services
d. Submit a written report to the County Department of Human Services office.

OBJECTIVE 5

Answers should include the following

a. Keep privileged information confidential
b. Get written consent from the resident or the resident's legal guardian if you need to share privileged information with someone other than your supervisor
c. Report some pieces of information such as cases of abuse and communicable diseases to the proper officials.